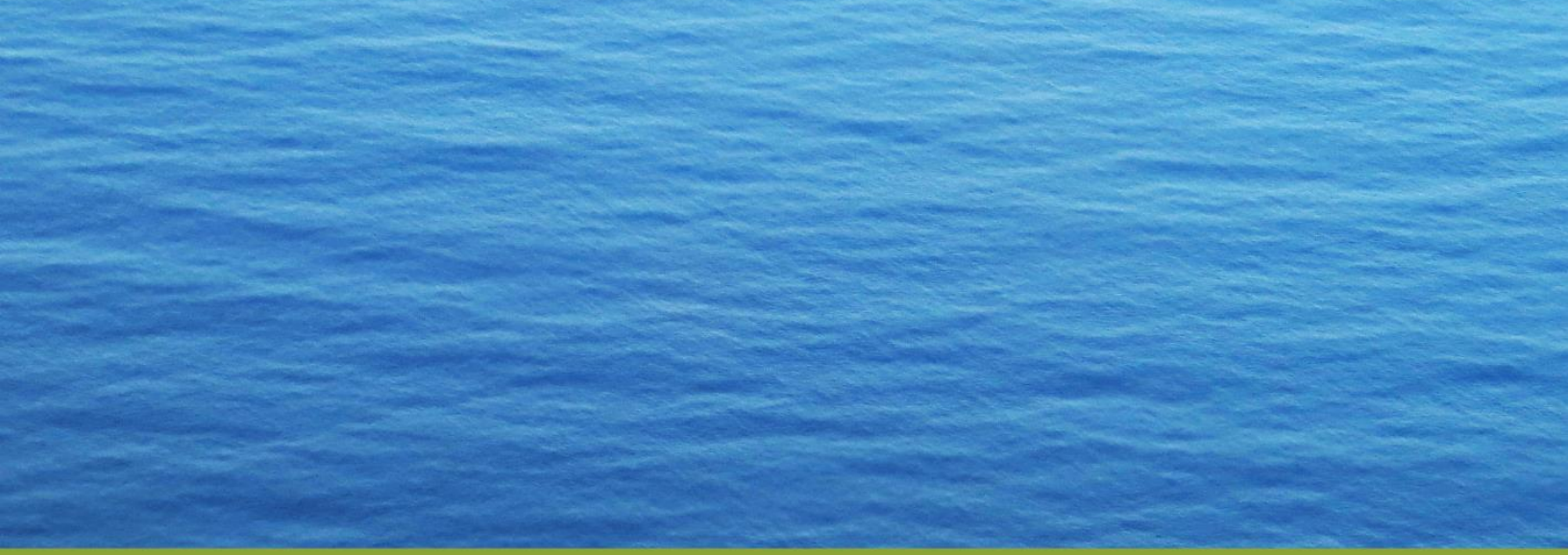


MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

ANNUAL REPORT

FISCAL YEAR 2022

July 1, 2021 - June 30, 2022

MDEQ

PROTECTING YOUR AIR, LAND, & WATER

MESSAGE FROM THE EXECUTIVE DIRECTOR

On behalf of the Mississippi Department of Environmental Quality, I am pleased to present you with our state fiscal year 2022 Annual Report. The programs and initiatives administered by MDEQ further our mission to protect human health and the environment. Our MDEQ team is committed to conserving and improving our state's abundant natural resources and will continue to work together to achieve our mission. Here are just some of the highlights of our work this past fiscal year:

- Added 15 new restoration projects totaling $51.2 million (p.7)
- Presented the 2021 Mississippi Restoration Summit, both in person and virtually (p.7)
- Recovered over $100,000 in expenses for Environmental Response Actions from responsible parties (p.20)
- Handled 890 calls for emergency response assistance (p.20)
- Selected 22 projects under first round of funding from the Volkswagen settlement for Mississippi's Environmental Mitigation program totaling $7.3 million for NOx reduction projects (p.23)
- Awarded over $5 million in solid waste management, recycling, solid waste planning and waste tire grants (p.33)
- Conducted approximately 1,200 air and water on-site inspections (p.53)
- Funded 11 new Water Pollution Control Revolving Loan Fund projects totaling $64.1 million (p.53)
- Awarded two grants from EPA totaling $2.5 million through the MDEQ Brownfield program (p.63)
- Completed 78 flow measurements on streams throughout the state in support of the MDEQ Mississippi Benthic Indicator of Stream Quality project (p.68)
- Performed 530 inspections on 339 dams, resulting in repairs or rehabilitation on 21 high hazard dams (p.74)
- Reclaimed 1,627 bonded mine acres through the MDEQ Office of Geology/Surface Geology Division (p.82)
- Published 32 geological papers (p. 82)
- Hosted and/or participated in 57 trainings, through MDEQ's Office of Community Engagement, to continue to address Environmental Justice concerns in the state of Mississippi (p.88)

The information contained within these pages will provide you with even more information about the work we do at MDEQ and especially during the past state fiscal year. We are proud to be stewards of our state's air, land, and water resources. The work we do would not be possible without your continued support. Thank you!

Chris Wells
Executive Director

STRATEGIC GOALS

This annual report seeks to correlate the following goals of the agency's strategic plan, as outlined in "Building a Better Mississippi: The Statewide Strategic Plan for Performance and Budgetary Success", with the results of its work in State Fiscal Year 2022.

Air Quality Goal: Ensure that Mississippi air quality is protective of the health and welfare of its citizens.

Waste Management Goal: Ensure the proper management of solid wastes and hazardous waste through waste reduction, recycling, and safe disposal practices to protect Mississippi's air, soil and water resources.

Remediation Goal: Protect human health and the environment through proper mitigation, remediation, reclamation, and restoration of natural resources.

Water Quantity Goal: Maintain sustainable quantities of surface and ground water in Mississippi.

Water Quality Goal: Protect and restore surface and groundwater quality in Mississippi.

Emergency Preparedness and Response Goal: Prevent, prepare for, and respond to public health, safety, and environmental emergencies.

Efficient and Effective Public Service Goal: To provide efficient and effective government services and be a good steward of the human, financial, and physical resources provided to the agency by the citizens of the state.

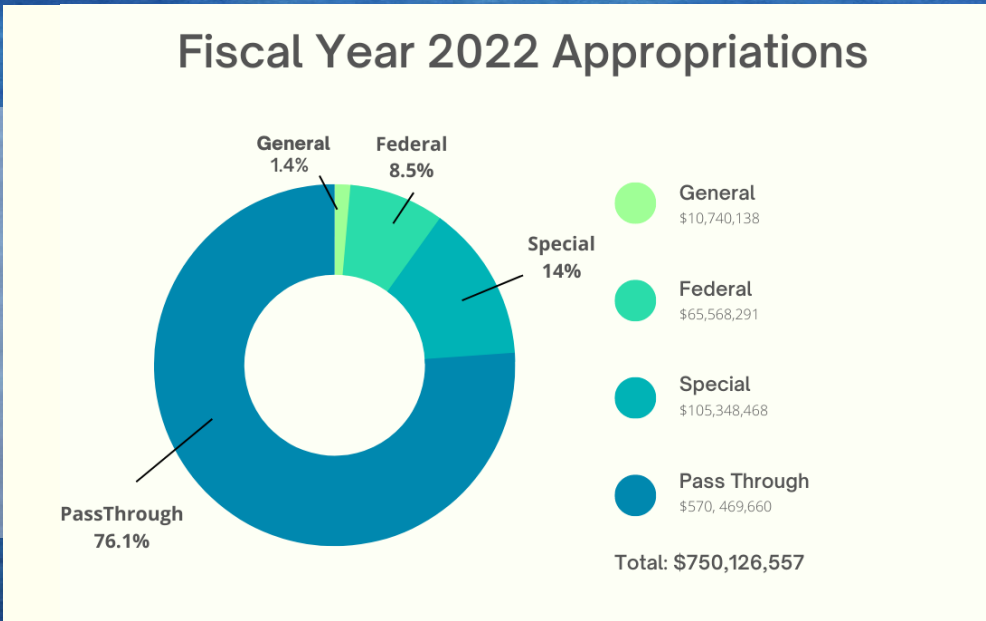


TABLE OF CONTENTS

MDEQ MISSION STATEMENT

Our mission is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.

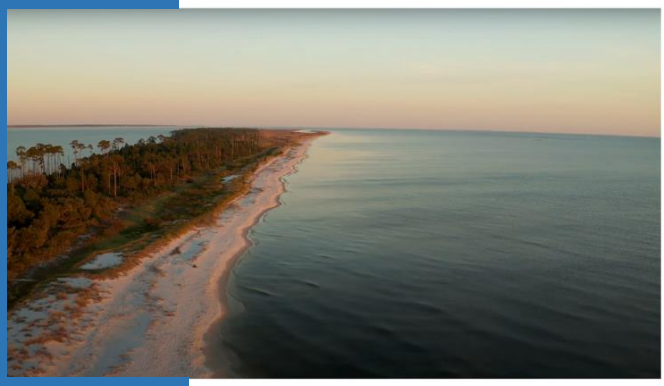
COMMISSION ON ENVIRONMENTAL QUALITY

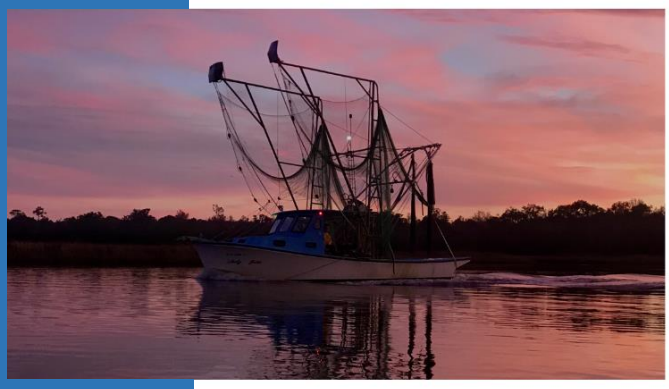
The Commission on Environmental Quality is empowered to formulate department policy, enforce rules and regulations, receive funding, conduct studies for using the state's resources, and discharge duties, responsibilities and powers as necessary.

THE MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

The Mississippi Environmental Quality Permit Board takes action on permits administered through MDEQ. The Permit Board issues, reissues, modifies, denies, transfers, and revokes Mississippi permits and certifications administered under the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act, the Surface Mining Control and Reclamation Act, state mining laws, and state water resource control laws.

RESTORATION





RESTORATION

Fiscal Year '22 Accomplishment Highlights

The Governor's Gulf Coast Advisory committee's seven subcommittee's recommendations resulted in 15 new projects totaling $51.2 million.

Presented the 2021 Mississippi Restoration Summit, both in person and virtually.

Mississippi's Multiyear Implementation Plan, as amended in November 2021 to include a total of thirty-nine projects totaling more than $174 million, was accepted by the U.S. Department of the Treasury in May 2022.

MDEQ leads the state's efforts to restore and enhance Mississippi's natural resources following the 2010 *Deepwater Horizon* oil spill. Executive Director Chris Wells serves as Mississippi's Trustee on the Deepwater Horizon Natural Resource Damage Assessment Trustee Council, the Governor's designee for the Gulf Coast Ecosystem Restoration Council, and the state's designee for the National Fish and Wildlife Foundation Gulf Environmental Benefit Fund. Together these bodies, comprised of federal agencies, five states, and a congressionally mandated non-governmental organization are working to implement multiple projects and initiatives to restore the natural resources of the Gulf of Mexico region.

MDEQ Office of Restoration

MDEQ's Office of Restoration oversees and manages all aspects of restoration funded through the NRDA process, the RESTORE Act, and the NFWF GEBF. Using a team of scientists, engineers, and other subject matter experts, MDEQ works with state and federal agencies, local governments, non-governmental organizations, residents, industries, and business owners to develop and implement restoration projects.

MDEQ continues to engage the public throughout the restoration process. Mississippians also have the opportunity to submit restoration project ideas into the state's project idea portal on the MDEQ website. Since its inception in October 2013, the portal has received more than 1,200 submissions ranging from ecological projects to economic development, to infrastructure projects.

Mississippi Restoration Funds

As a result of the oil spill and settlement of claims, MDEQ is managing approximately $1.45 billion of the $2.1 billion Mississippi will receive to support recovery and restoration efforts. These funds are allocated to the state from civil and criminal penalties levied against the responsible parties under the Clean Water Act and natural resource damages under the Oil Pollution Act. The restoration funds that MDEQ manages for implementing restoration projects come from three primary funding sources:

- RESTORE Act - $796 million to be paid by the responsible parties over time in accordance with the court-approved payment schedule through 2031.
  - Direct Component (Bucket 1) - $372.9 million
  - Comprehensive Plan Component (Bucket 2) – Under the RESTORE Act, approximately $1.59 billion will be administered with each member of the RESTORE Council eligible to receive funding in a competitive process. To date, $91.6M has been allocated to Mississippi.
  - Spill Impact Component (Bucket 3) - $304.8 million
  - Centers of Excellence Research Grants Program (Bucket 5) - $26.6 million
- NFWF GEBF - $356 million paid by the responsible parties to the GEBF
- Natural Resource Damage Assessment - $296 million

Mississippians have the opportunity to submit restoration project ideas into the state's project idea portal on the MDEQ website.

The RESTORE Act

The RESTORE Act makes available 80 percent of Clean Water Act civil penalties paid by the responsible parties for the oil spill (i.e., BP and Transocean) for programs, projects, and activities that restore and protect the environment and economy of the Gulf Coast through the Gulf Coast Restoration Trust Fund. Within the RESTORE Act, there are five funding components (or "buckets"), which make funds available to each of the states in accordance with certain legal parameters:

- Direct Component (Bucket 1)
- Comprehensive Plan Component (Bucket 2)
- Spill Impact Component (Bucket 3)
- National Oceanic and Atmospheric Administration Science Program (Bucket 4)
- Centers of Excellence Research Grants Program (Bucket 5)

The State of Mississippi is involved in the administration of funds from Buckets 1, 2, 3, and 5. MDEQ works with the U.S. Department of Treasury for Buckets 1 and 5, and the RESTORE Council for Buckets 2 and 3. NOAA administers Bucket 4.

The RESTORE Council, established by the RESTORE Act, develops, and oversees implementation of a comprehensive plan to help restore the ecosystem and economy of the Gulf Coast Region. The RESTORE Council is comprised of governors, or their respective designees, from the five affected Gulf States, the Secretaries from the U.S. Departments of the Interior, Commerce, Agriculture, and Homeland Security as well as the Secretary of the Army and the Administrator of the EPA.

Governor's Gulf Coast Advisory Committee

The Governor's Gulf Coast Advisory Committee was established in 2021 to research and recommend projects to the Governor under the RESTORE Act Direct Component and Spill Impact Component. For 2022, the committee recommended projects for consideration in Amendment 6 to the Multiyear Plan Implementation Plan and State Expenditure Plan.

The committee's seven subcommittee's recommendations resulted in 15 new projects totaling $51.2 million selected and announced by Governor Reeves in November 2022. The addition of these projects to the projects selected by Governor Reeves brings the total number of projects to 31 totaling $114 million during this administration.

Direct Component (Bucket 1)

Multiyear Implementation Plan

In April 2022 the U.S. Department of the Treasury accepted Amendment No. 5 to Mississippi's Multiyear Implementation Plan. The MIP describes the projects, programs, and activities for which Mississippi will spend "Bucket 1" funds. The MIP Amendment No. 5 included the following ten updates totaling approximately $37.5 million of new or additional project funding:

- Mississippi Gulf Coast Water Quality Improvement Program ($1.1 million in additional funding)
- Mississippi Gulf Coast Coliseum and Convention Center Site Capacity Improvements ($1.5 million)
- Commercial Proving Grounds for Space to Seafloor Environmental Monitoring ($1.65 million)
- Hancock County Technology Park Economic Development Program ($5.1 million)
- City of Moss Point Interstate 10 Commercial Corridor Improvements ($2.2 million in additional funding)
- Gulfport-Biloxi Airport Site Mitigation and Improvement ($7.4 million)
- Broadwater Marina Restoration Project ($5.5 million)
- Hancock County Fairground Revitalization ($6.1 million)
- Washington Avenue Gateway ($6.6 million)
- Planning Assistance – MIP Amendment Development ($500,000 in additional funding)
- There are 39 approved projects on the MIP.

Council Selected Component (Bucket 2)

In 2015, the RESTORE Council approved the first Funded Priorities List totaling approximately $156.6 million in restoration activities across the Gulf. In April 2021, the RESTORE Council approved FPL 3b. This allocated an additional $68.8 million to Mississippi projects. In August of 2021, the initial 2015 Funded Priorities List was amended to authorize the transfer of a previously approved restoration project at Deer Island to MDEQ ($3 million). MDEQ is in the process of implementing the projects approved on the 2015 FPL and the 2021 FPL 3b.

Spill Impact Component (Bucket 3)

State Expenditure Plan

In May 2022, the RESTORE Council approved Mississippi's State Expenditure Plan Amendment that describes the project, programs, and activities for which the state will spend "Bucket 3" funds. The SEP Amendment included six updates totaling approximately $ 28 million:

- Mississippi Beachfront Resilience ($4.95 million additional funding) - This program will support the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands through the restoration and development of sand dunes and protection of beaches with additional boardwalk.
- Public/Private Training Partnership (Accelerate MS) ($2.2 million) - This project would support workforce development and job creation in the Gulf Coast Region by enhancing coordination among workforce development partners in Hancock, Harrison, and Jackson Counties.
- Coastal Habitat Management Program ($3.3 million) - This program would support the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region through the development and implementation of management plans for existing and newly acquired tracts within the Coastal Preserves Program in Mississippi.
- Gulf Center for Security and Emerging Technology Fusion ($5.5 million) - This project would support workforce training efforts in the Gulf Coast Region through the development of training programs in emerging technology industries.
- Improvement of Wastewater Quality and Solid Waste Disposal from Shrimp Processing Industry ($5.5 million) - This project would support the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region through the implementation of water quality improvement technologies for wastewater and solid waste disposal from the shrimp processing industry on the Mississippi coast.

- D'Iberville Working Waterfront and Commercial Seafood Harbor ($6.6 million) - This project would support the planning activities for infrastructure benefitting the economy in the Gulf Coast Region.
- There are currently 16 approved projects/programs for the SEP.

Centers of Excellence Component (Bucket 5)

The Mississippi Based Restore Act Center of Excellence was selected in 2015 as a partnership among Jackson State University, Mississippi State University, the University of Mississippi, and the University of Southern Mississippi focusing on science, technology, and monitoring in the Gulf Coast Region. In 2017, MDEQ executed a sub-award agreement with USM as the lead university for the MBRACE consortium. In the past year, MBRACE continued research activities under its second Core Research Program (Core 2) which is a continuation of the activities which occurred under Core 1. Additionally, in the past year, MBRACE continued research through projects which were competitively selected among researchers from all member universities.

National Fish and Wildlife Foundation

Mississippi will benefit from $356 million as a result of the Clean Water Act criminal settlements resulting from the oil spill. The National Fish and Wildlife Foundation administers these funds through the Gulf Environmental Benefit Fund. NFWF-GEBF has awarded grants for 32 projects in Mississippi with a total of approximately $178 million. The board approved six new projects for 2022:

- Artificial Reef and Habitat Enhancement: Barrier Island Reefs ($3.1 million) - This project was awarded directly to the Mississippi Department of Marine Resources to create five new artificial reefs in Mississippi waters.
- Bellefontaine Nearshore Habitat Restoration Phase 1 Planning ($1 million) – This project will conduct sediment and hydrodynamic modeling to design a living shoreline of up to two miles in length to prevent shoreline retreat and provide the opportunity for coastal marsh to establish.
- Artificial Reef and Habitat Enhancement: Katrina Key ($8.5 million) – This project was awarded to MDMR to provide additional acreage of nearshore artificial reef habitat that will enhance shelter for reef species.
- Inshore Artificial Reef Assessment and Petit Bois Reef Planning ($662,000) –The purpose of this project is to provide MDMR with structural and ecological information regarding the current condition of these inshore reefs and document species utilization, as well as permitting for a 15-acre reef zone north of Petit Bois Island.
- Point Cadet Nearshore Habitat Restoration – Phase 1 Planning ($410,000) - The project will support engineering, design and permitting of an emergent breakwater structure and submerged reefs at Point Cadet in the Biloxi Waterfront Park.
- West Hancock County Nearshore Habitat Restoration Phase 1- Planning ($1.4 million) - This project will engineer and design a series of submerged artificial reefs and create subtidal habitat enhancements in Hancock County.

Natural Resource Damage Assessment

The Deepwater Horizon Natural Resource Damage Assessment is the legal process for developing the public's claim for natural resource damages against the party or parties responsible for injuries to those resources and the services they provide. The NRDA settlement allocation for Mississippi is approximately $296 million.

Early Restoration

In 2011, BP agreed to provide up to $1 billion toward Early Restoration projects to partially address injuries to natural resources caused by the oil spill. This agreement, "Framework for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill," represented a preliminary step toward the restoration of injured natural resources and was intended to expedite the start of restoration in advance of the completion of the injury assessment process. Under this agreement, DOI, NOAA, and the Gulf states each received up to $100 million to implement early restoration projects. The remaining $300 million was allocated by NOAA and DOI for early restoration projects proposed by state trustees.

- Phase I ($13.6 million) – Mississippi's projects from Phase I included the laying of approximately 1,400 acres of oyster cultch in the Mississippi Sound and a near shore artificial reef enhancement project. Construction activities and monitoring activities for both projects are complete.

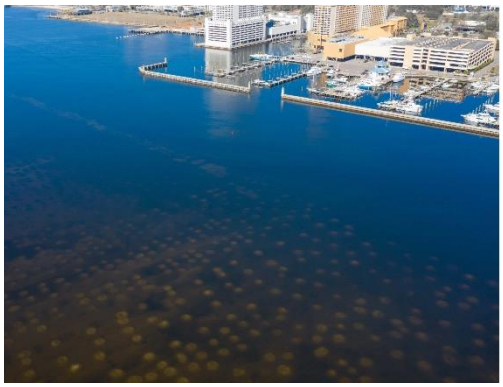
- Phase II: There were no Phase II projects for Mississippi.

- Phase III: Mississippi has four Phase III projects ($68.95 million)

    - Hancock County Marsh Living Shoreline ($50 million) – Construction of six miles of breakwaters that will develop into living reefs. Benefits include reduction of erosion, re-establishment of oyster habitat, and enhanced fisheries resources and marsh habitat. Approximately 46 acres of marsh has been constructed in 2020-2021 to protect and enhance the existing shoreline near Heron Bay. In addition, 46 acres of sub-tidal oyster reef were created in Heron Bay to protect the shallow bay and increase oyster production in the area. Construction activities began in 2016 and were completed in late spring of 2021. MDEQ and NOAA are implementing trustees.
    - Restoration Initiative at the INFINITY Science Center ($10.4 million) – INFINITY is an interactive science research, education, and interpretive center located in Hancock County with funding used for visitors' access to coastal natural resources. Completed in 2018, enhancements include the Possum Walk Heritage Trail and associated electric tram tour, the Biome Boardwalk showcasing natural habitats of native landscaping, construction of a new 3-D Theater, refurbishment of the Xspherience theater, and the construction of 11 new science exhibits.
    - Popp's Ferry Causeway Park ($4.7 million) – This project in Harrison County included construction of an interpretive center, nature trails, boardwalks, fishing piers, bait shop, kayak launch, and other recreational enhancements.

- Pascagoula Beachfront Promenade ($3.8 million) – Funds were used to complete a two-mile, ten-foot-wide lighted concrete pathway complete with amenities along the Pascagoula beach.

- Phase IV Project
  - Restoring Living Shorelines and Reefs in Mississippi Estuaries ($30 million) – This project includes restoration of intertidal and subtidal reefs and the use of living shoreline techniques including breakwaters. Projects have been implemented at Deer Island and Grand Bay and Graveline Bay. The project builds on recent collaborative projects implemented by MDMR, NOAA, and The Nature Conservancy. Over time, the breakwaters, intertidal, and subtidal restoration areas will develop into living reefs that support benthic secondary productivity and breakwaters will reduce shoreline erosion and marsh loss. There will be an additional component to this project added in 2022-2023, St. Louis Bay Living Shoreline.



Photos above: Deer Island;
Below: Hancock County Living Shoreline

Post-Settlement NRDA Restoration

As part of the settlement with BP in 2016, the court approved a consent decree outlining the framework for the restoration of natural resource damages across the Gulf. The DWH Trustee Council completed the Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement and Programmatic Environmental Impact Statement that includes an assessment of the injury to and the framework to restore injured natural resources. The NRDA settlement, including early restoration, totals $296 million for Mississippi projects for the following restoration types:

- Wetlands, Coastal and Nearshore Habitats
- Habitat projects on Federally Managed Lands
- Nutrient Reduction (Nonpoint Source)
- Sea Turtles
- Marine Mammals
- Birds
- Oysters
- Provide and Enhance Recreational Opportunities
- Monitoring and Adaptive Management

The Mississippi Trustee Implementation Group is responsible for restoring the natural resources and services in Mississippi and is comprised of MDEQ, NOAA, DOI, USDA, and EPA. The MS TIG identifies restoration projects, develops draft and final restoration plans, and implements specific restoration actions that are consistent with the PDARP/PEIS. Proposed restoration projects and relevant restoration plans must be consistent with the Consent Decree, Oil Pollution Act, NRDA regulations, and Trustee Council governing documents. The Trustees ensure that the public is involved through public noticing of proposed restoration plans, public comment, and consideration of comments received.

MS TIG Restoration Plan 1

The first plan developed by the MS TIG was released in June 2017, and includes the following three projects currently being implemented:

- Graveline Bay Land Acquisition and Management Project ($11.5 million) – The project includes acquisition, preservation, and habitat management in the Graveline Bay Coastal Preserve. MDEQ and the DOI are Implementing Trustees for the project working with MDMR as a project partner to preserve and enhance up to 1,410 acres of habitat. Priority tracts have been identified and landowner conversations are being initiated.

- Grand Bay Land Acquisition and Habitat Management Project ($16 million) - This project will result in a combination of acquisition and habitat management within the Grand Bay National Wildlife Refuge, Grand Bay National Estuarine Research Reserve, and Grand Bay Savanna Coastal Preserve. MDEQ and the DOI are Implementing Trustees with MDMR and the U.S. Fish and Wildlife Service as project partners. The project includes preservation of up to 8,500 acres and enhancement of up to 17,500 acres of habitat. In 2018, over 1,500 acres were acquired and will be jointly managed by staff at the Grand Bay National Estuarine Research Reserve/Grand Bay National Wildlife Refuge. In 2020, approximately seven additional acres were acquired.

- Upper Pascagoula River Water Quality Enhancement Project ($4 million) - The project includes development and implementation of conservation plans to reduce nutrient and sediment contributions in the watershed. The USDA, EPA, and MDEQ are Implementing Trustees for the project which includes an extensive outreach program to landowners. Conservation practices will be planned and implemented on properties throughout the watershed with emphasis given to properties bordering rivers and streams.

Mississippi TIG Restoration Plan II

The second plan developed by the MS TIG was released in September 2020 and includes the following proposed projects. Implementation of the projects began in 2022.

- Oyster Spawning Reefs in Mississippi ($10 million) - The project will restore or create a minimum of 100 acres and a maximum of 400+ acres of high-relief cultch placements in up to six locations in the Mississippi Sound and areas including St. Louis Bay, Heron Bay, Back Bay/Biloxi Bay, Graveline Bay, Pascagoula Bay, and Grand Bay. This project includes the possibility of placement of more than 400 acres where it is feasible.

- Mississippi Oyster Gardening Program ($500,000) - The project will be implemented over a five-year period and is continuation of the current NFWF-GEBF funded project in which volunteers grow sub-adult oysters from spat on shell stock in gardens that hang from waterfront piers, wharves, and docks.

- Wolf River Coastal Preserve Habitat Management (Dupont Tract and Bell's Ferry Tract ($3.13 million) - The project will restore ecologically connected coastal habitats adjacent to St. Louis Bay and benefit habitats ranging from salt marshes to coastal freshwater wetlands to upland buffer communities. Habitat management will occur within 2,500 acres of the Wolf River Coastal Preserve.

- Hancock County Coastal Preserve Habitat Management – Wachovia Tract ($1.76 million) - The project will restore ecologically-connected coastal habitats by providing habitat management to pine flatwoods as well as freshwater and brackish marsh within the existing 1,203-acre project area.

Restoration Plan III

The third plan developed by the MS TIG was released in 2021 and included the following projects. The implementation of these projects will begin in 2023.

- Improve Native Habitats on Federally Managed Lands ($3 million)
- Maintaining Enhanced Sea Turtle Stranding Network Capacity and Diagnostic Capabilities ($2.5 million)
- Maintaining Enhanced Marine Mammal Stranding Network Capacity and Diagnostic Capabilities ($2.3 million)
- Reduction of Marine Mammal Fisher Interactions through Trawl Technique and component Material Improvements ($3.1 million)
- Bird Stewardship and Enhanced Monitoring in Mississippi ($6.1 million)
- Clower-Thornton Nature Trail Improvement ($630,000)
- Environmental Education and Stewardship at Walter Anderson Museum of Art ($1.4 million)

Restoration Plan IV

The MS TIG began the restoration planning process for Restoration Plan IV in 2021 and plans to release the draft plan in 2023. The MS TIG requested project ideas for the following restoration types:

- Wetland Coastal and Nearshore Habitats
- Nutrient Reduction
- Provide and Enhance Recreational Opportunities

EMERGENCY RESPONSE

EMERGENCY RESPONSE

Fiscal Year '22 Accomplishment Highlights

Provided statewide emergency response coordination throughout the Covid Pandemic on a 365-day, 24/7 basis.

Handled approximately 890 calls for assistance.

Used environmental contractors for response actions that totaled $192,475 and the agency was able to recover approximately $107,000 from responsible parties.

The Emergency Response Division responds to emergencies involving hazardous materials, oil spills, or any pollutant that poses a threat to human health or the environment. The Emergency Response staff handled approximately 890 calls for assistance in Fiscal Year 2022. Contractor expenditures for response actions totaled $192,475, and the agency was able to recover approximately $107,000 from responsible parties.

MDEQ and the Mississippi Emergency Management Agency work together to provide effective around-the-clock spill response. MEMA is notified of emergencies, and they, in turn, contact MDEQ personnel who provide on-site response and technical assistance.

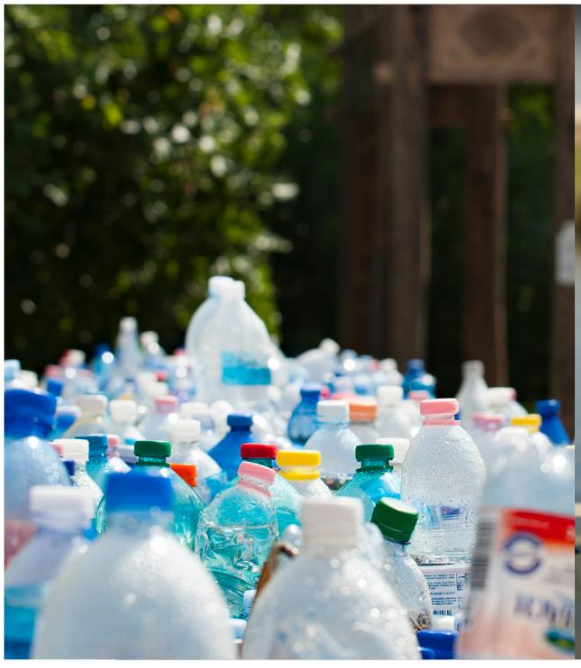
Emergency Objective: Maintain staff that is adequately trained and equipped to conduct an environmental emergency response.

MDEQ maintains the resources and readiness to support local emergency response personnel and communities when an environmental or public health emergency occurs quickly and effectively. This readiness is accomplished by training alongside regional response teams, and state agencies such as MEMA, the Mississippi State Department of Health, the Mississippi Department of Public Safety, and federal agencies such as EPA, the Department of Defense, U.S. Department of Homeland Security, and the Federal Emergency Management Agency. Additionally, MDEQ maintains expertise in handling hazardous, radioactive materials, and biohazard emergencies by participating in advanced-level courses and exercises.

MDEQ and the Mississippi Emergency Management Agency work together to provide effective around-the-clock spill response.

Emergency Preparedness and Response Strategic Goal: Prevent, prepare for, and respond to public health, safety, and environmental emergencies.

POLLUTION CONTROL



Air Quality, Waste, Water Quality, & Remediation

AIR DIVISION

Fiscal Year '22 Accomplishment Highlights

Modernized the Title V Program fee structure to fund the program more equitably and adequately.

Selected 22 NOx reduction projects under the first round of funding for Mississippi's Volkswagen Environmental Mitigation Program totaling $7.3 million.

Continued to attain all National Ambient Air Quality Standards throughout the state.

Ambient Air Quality

The U.S. Environmental Protection Agency (EPA) is required by the federal Clean Air Act (CAA) to set National Ambient Air Quality Standards (NAAQS) for certain pollutants considered to be "criteria" air pollutants. EPA conducts periodic reviews of the standards, and the science upon which they are based, and revises the standards when appropriate. EPA uses the data collected by air monitoring networks to help determine whether areas are meeting the NAAQS.

MDEQ operates a continuous, statewide ambient air monitoring network of sites with both fully automated analyzers and 24-hour manual samplers for measuring air quality.

This monitoring network serves many purposes:

- Determines if areas are meeting the NAAQS for ground-level ozone (O_3), particulate matter (PM), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and carbon monoxide (CO)
- Generates data to assist in determining methods to reduce visibility impairments
- Supports ozone reduction programs
- Determines general air quality trends

Air Quality Goal:
Ensure that Mississippi air quality is protective of the health and welfare of its citizens.

Monitor Locations and Pollutants Measured

Cleveland – *Ozone, $PM_{2.5}$*

Gulfport - *Ozone, $PM_{2.5}$*

Hattiesburg – *$PM_{2.5}$*

Hernando - *Ozone, $PM_{2.5}$*

Jackson - *Ozone, $PM_{2.5}$*

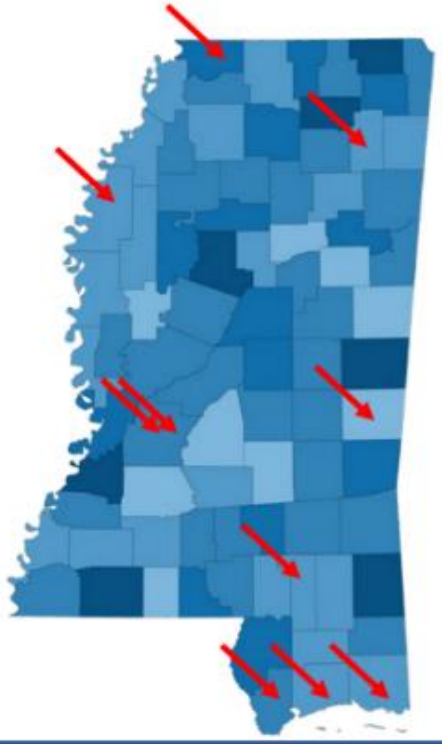
Jackson (N-Core) - *Ozone, $PM_{2.5}$, PM_{10}, CO, NO_y, SO_2*

Meridian - *Ozone*

Pascagoula - *Ozone, $PM_{2.5}$, CO, NO, NO_2, NO_x, SO_2*

Tupelo - *Ozone*

Waveland - *Ozone, $PM_{2.5}$*



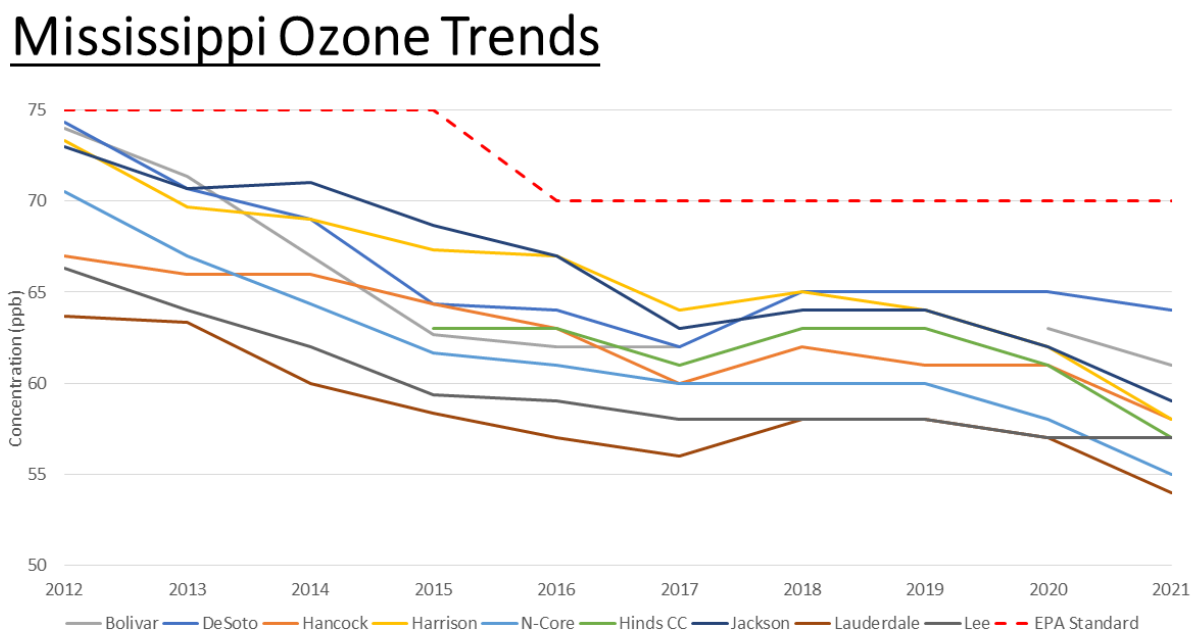
Air Quality Objective:
Maintain Compliance with
Federal Air Quality Standards.

EPA began setting NAAQS for the criteria air pollutants over 50 years ago. The first NO_2 and CO standards were established in 1971 and have been reviewed many times over the years. After each review, EPA has chosen to retain the original CO standard and only revised the NO_2 standard once, in 2010. EPA considers all Mississippi counties to be attaining the current NO_2 and CO standards and has designated them as such.

For the primary SO_2 standard, MDEQ worked in cooperation with affected facilities in 2010 to achieve attainment designations. MDEQ has continued to work with these facilities to provide EPA with the information required each year to demonstrate these areas continue to attain the standard. EPA also established the current secondary SO_2 standard many years ago, and Mississippi continues to attain that standard.

EPA has both primary and secondary 24-hr and annual standards for very fine particulate matter, or $PM_{2.5}$, and primary and secondary 24-hr standards for PM_{10}. Mississippi is meeting these standards and has been designated as such by EPA. All PM standards are currently undergoing review by EPA.

Emissions reductions in Mississippi and surrounding states, as well as favorable meteorological conditions, resulted in downward trends in ozone concentrations over the last decade, as can be seen in the following graph. These downward trends allowed EPA to designate Mississippi as attaining the current ozone standards set in 2015. MDEQ participates in a voluntary ozone-precursor reduction program in partnership with local governments and business leaders on the Mississippi Gulf Coast and in DeSoto County aimed at preventing future nonattainment of ozone standards. Both the primary and secondary ozone standards are currently under review by EPA.



In Fiscal Year 2022, MDEQ continued to work with EPA to get mandated, long- term planning documents, known as State Implementation Plans, in place and approved. These plans demonstrate Mississippi's commitment and ability, through our regulatory infrastructure, to continue meeting all NAAQS in every county of the state, while also minimizing our contribution to the interstate transport of pollution. While EPA has recently asserted itself in an attempt to take control of planning efforts associated with the 2015 ozone NAAQS in many states across the country, including Mississippi, MDEQ continues to work to develop approvable plans to keep Mississippi as the lead in these planning efforts.

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Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects

To inform the public regarding ambient air quality across the state, MDEQ issues daily air quality forecasts using EPA's Air Quality Index (provided here) for both ozone and particle pollution for DeSoto County, the Jackson Metropolitan Area, and the Mississippi Gulf Coast from April through October each year. MDEQ makes these forecasts available through e-mail, the MDEQ website, and Twitter. MDEQ uses the forecasts to keep the public informed about the status of air quality, to issue health advisories, and to notify the members of ozone reduction programs to implement mitigating actions.

Regional Haze Planning

Mississippi is working with nine other southeastern states and tribal associations known as the Visibility Improvement State and Tribal Associations of the Southeast (VISTAS) to address EPA's Regional Haze Rule. MDEQ staff participates with the VISTAS group to analyze air emissions impacts on visibility (or haze) in federal Class I areas in the southeast. Although Mississippi does not have any designated federal Class 1 areas, the Breton Wilderness Area (Chandeleur Islands) in Louisiana and the Sipsey Wilderness Area in northern Alabama are close enough to Mississippi that air emissions from sources in Mississippi must be evaluated for visibility impacts. While past years' efforts were focused on developing the modeling necessary to identify sources to be included in Regional Haze state implementation plans, efforts in Fiscal Year 2022 focused on drafting the Regional Haze SIP for the current (i.e., second) planning period. MDEQ plans to finalize and submit the plan to EPA in Fiscal Year 2023.

Title V Operating Permit Program

The Clean Air Act requires each major source of air pollution to obtain a Title V Operating Permit, which sets out all air requirements applicable to the source and specifies the methods by which the source must demonstrate compliance. Sources subject to the program are required to pay an annual fee to cover the program costs. The MDEQ Environmental Permits Division handles all aspects of Title V permitting, while the MDEQ Environmental Compliance and Enforcement Division handles all compliance certifications and demonstrations. The MDEQ Air Division is responsible for managing the fee portion of the Title V program for the approximately 250 sources in the state.

Mississippi law requires the establishment of the Title V Advisory Council (Council) to evaluate the costs of the program, to recommend an equitable fee system, and to conduct an annual program review that establishes an appropriate fee for the upcoming fee year. MDEQ staff meets regularly with the Council to provide updates on Title V program activities. Annually, the Air Division staff develops a work plan for the upcoming year that includes all functional areas of the Title V program. During that time, staff compiles data on projected and actual program revenue, expenditures, and pollutant emission rates. Air Division staff reports this information to the Council to aid in their annual review and evaluation of the program to determine an adequate annual fee. MDEQ staff then reports the results of the Council's annual review and fee recommendation to the Commission on Environmental Quality (Commission). The Commission considers the recommendation and sets the Title V program fee for the upcoming fee year.

Recently, the Council determined that the fee system established in 1995 was no longer equitable or adequate based on their evaluation of the needs and costs of the program and sought to identify a more appropriate fee system. In Fiscal Year 2021, MDEQ staff worked with the Council to develop a new fee system and draft revised regulations necessary to implement such a change. During Fiscal Year 2022, MDEQ officially adopted the new fee system after appropriate notice and extensive outreach to Title V sources and the public regarding the proposed changes. The new fee system becomes effective in Fiscal Year 2023.

During Fiscal Year 2022, the fee rate was $46 per ton of regulated air pollutants, which generated approximately $4.03 million for Mississippi's Title V program. There were 52 Title V permits issued, including initial issuances, renewals, and modifications. There were also 3 new Synthetic Minor Operating Permits issued for facilities that would have otherwise been required to obtain a Title V permit, except that the owner or operator elected to take federally enforceable permit restrictions to limit allowable emissions below Title V major source thresholds. There were 115 Title V inspections conducted.

Air Emissions Inventory

The MDEQ Air Division develops an inventory each year that quantifies air emissions from larger emitting sources. This work involves gathering and validating emissions data from sources and submitting it to EPA. Every third year, EPA requires a complete, much larger inventory of sources which is compiled into the National Emissions Inventory. The complete inventory includes emissions from each emission unit at all major Title V sources, estimated emissions from smaller stationary sources, and emissions from mobile sources. Each inventory quantifies emissions for over 200 air pollutants and includes detailed emission unit information such as control devices, exhaust stack parameters, and fuel type. In January 2022, the Air Emissions Inventory Branch completed and submitted the 2020 emissions inventory, which constituted the more robust triennial review and submittal. In addition, data for 2021 emissions was requested and the inventory is being reviewed and compiled for submittal in January 2023.

Mississippi Diesel Emissions Reduction Program

MDEQ utilizes Diesel Emissions Reduction Act (DERA) grant funds from EPA for the replacement of older diesel school buses with newer and cleaner ones. The DERA-funded Mississippi Diesel School Bus Replacement Program began in 2014 and has since awarded over $2 million to 54 school districts for the purchase and replacement of 131 school buses. In Fiscal Year 2022 alone, after receiving applications from 28 school districts, MDEQ selected 15 school districts to receive $291,331 to help replace 18 school buses.

Asbestos

State regulations require affected facilities to inspect for asbestos before any demolition or renovation work begins and to specify work practices and procedures to prevent asbestos fiber emissions during such activities. MDEQ assists project owners and operators in understanding the requirements of the regulations and performs demolition and renovation project inspections to ensure safe and compliant operations. Additionally, MDEQ provides outreach to homeowners, supplying them with information on how to safely manage the possible asbestos hazards of non-regulated demolition or renovation activities.

Each Mississippi school district must address regulatory requirements and asbestos management activities for each school in an asbestos management plan. MDEQ performs asbestos management plan inspections to ensure requirements are being satisfied and plans are protective of students, teachers, and school employees.

MDEQ also ensures, through its asbestos abatement activity certification program, that individuals who engage in asbestos abatement activities receive professional training and demonstrate they are competent to perform these services.

During Fiscal Year 2022, MDEQ inspected 342 demolition and renovation projects, investigated 28 complaints, certified 1548 applicants to perform asbestos activities, and inspected 14 school districts with asbestos management plans.

Air Toxics

The term “air toxics” refers to air pollutants that EPA has listed as Hazardous Air Pollutants (HAP). These air pollutants may cause acute or chronic health conditions and are primarily controlled or reduced through regulations called National Emission Standards for Hazardous Air Pollutants (NESHAP). Impacted facilities generally must install additional control equipment, implement work practice standards, and/or change process equipment and materials to reduce HAP emissions. These standards and emission limitations require the maximum achievable control technology at major sources of HAP and generally available control technology at smaller “area” sources of HAP to achieve reductions in HAP.

NESHAPs regulate emissions from 174 different source categories at major HAP emitting facilities and 70 source categories at area sources of HAP. The universe of affected facilities is quite large and varied; the affected facilities range from large chemical facilities and petroleum refineries to small dry-cleaning facilities, gasoline stations, and even small auto body repair shops.

Air toxic activities also include the implementation of accidental release prevention regulations. These regulations apply to facilities with certain chemicals that could be very dangerous to public health and the environment in the event of a chemical accident or uncontrolled release. There have been multiple revisions to these regulations in recent years. The frequent changes have resulted from evaluation of chemical accidents, court challenges, and petitions for review. The most recent revision occurred in December 2019 to remove or streamline previously added requirements. Under President Biden's Executive Order 13990, the December 2019 revision is currently under review.

The accidental release prevention regulations require facilities with chemicals in amounts above de minimis levels to employ process safety measures and controls and plan for the possibility of an accidental chemical release that could endanger public safety. A regulated facility's planning and procedures to prevent and mitigate chemical accidents must be outlined in a Risk Management Plan that is submitted for agency review. MDEQ remains aware of all changes in regulatory requirements, monitors the ever-changing universe of regulated sources, and evaluates each RMP during compliance inspections. During Fiscal Year 2022, there were 143 active regulated facilities, and staff completed 30 compliance inspections.

Greenhouse Gases

On December 7, 2009, the EPA Administrator signed the Endangerment Finding for greenhouse gases from mobile sources. EPA used this finding as the basis to expand its regulatory efforts to regulate large stationary sources of greenhouse gas emissions. Initial regulatory efforts of greenhouse gases included regulations for the power sector, oil and natural gas industries, and landfills. The most significant effort to date has been multiple attempts to regulate existing electric utility generating units at power plants. First, EPA released the Clean Power Plan in August of 2015. After many court challenges, a stay of the rule requirements, and EPA's required review of the rule under then-President Donald Trump's Executive Order 13783, EPA repealed the Clean Power Plan in July 2019. Through this same action, EPA replaced the Clean Power Plan with the Affordable Clean Energy (ACE) Rule. The ACE Rule had legal challenges of its own and was vacated by the court and remanded to EPA on January 19, 2021. EPA anticipated following the ACE Rule with yet another attempt to regulate greenhouse gases from existing power plants under 111(d) of the Clean Air Act. However, on June 30, 2022, the U.S Supreme Court ruled in favor of petitioners in the consolidated court challenges of the 2015 Clean Power Plan in West Virginia v. Environmental Protection Agency, holding that Congress did not grant EPA authority under Section 111(d) to devise emissions caps based on the generation shifting approach taken in the Clean Power Plan. Therefore, the future path to further regulation of greenhouse gases from stationary sources is under evaluation by EPA. MDEQ will continue

to monitor EPA's efforts to regulate sources of greenhouse gases and participate in the regulatory process where necessary to support reasonable and effective regulations.

Lead-Based Paint Program

Mississippi's Lead-based Paint Program is an EPA-approved and delegated state certification program that determines the requirements for certification of persons and firms engaged in lead-based paint activities. It also establishes work practice standards for performing such activities and the procedures and requirements for accreditation of lead-based paint training programs. The regulations are applicable to all persons engaged in lead-based paint abatement and renovation activities in targeted housing and child-occupied facilities.

Volkswagen Environmental Mitigation Trust

In 2017, then-Governor Phil Bryant designated MDEQ as the agency to administer the state's portion of the funds resulting from the Volkswagen (VW) Diesel Settlement. The state's allocation is $9.87 million of the $2.7 billion Environmental Mitigation Trust Fund (Fund). The state's allocation was based on the number of offending vehicles registered in the state. VW established the Fund to settle claims under the Clean Air Act that it sold vehicles with "defeat devices" designed to cheat emissions tests for its diesel vehicles.

Mississippi will use the funds over the next several years to support projects that reduce nitrogen oxide (NOx) emissions from the transportation sector and improve air quality, predominantly through the replacement of older diesel-powered emission sources with cleaner technology and implementation of zero emission vehicle supply equipment projects. MDEQ will award funds in accordance with the Environmental Mitigation Trust Agreement and the state's Beneficiary Mitigation Plan, which was approved by the Fund's Trustee in 2019. In Fiscal Year 2022, after receiving applications from 44 separate entities, MDEQ selected 22 projects for a total of $7,331,408 in funding.

WASTE DIVISION

Fiscal Year '22 Accomplishment Highlights

Reported 6.1 million tons of waste disposed at permitted landfills and rubbish sites.

Collected over 13,000 pounds of household medical sharps.

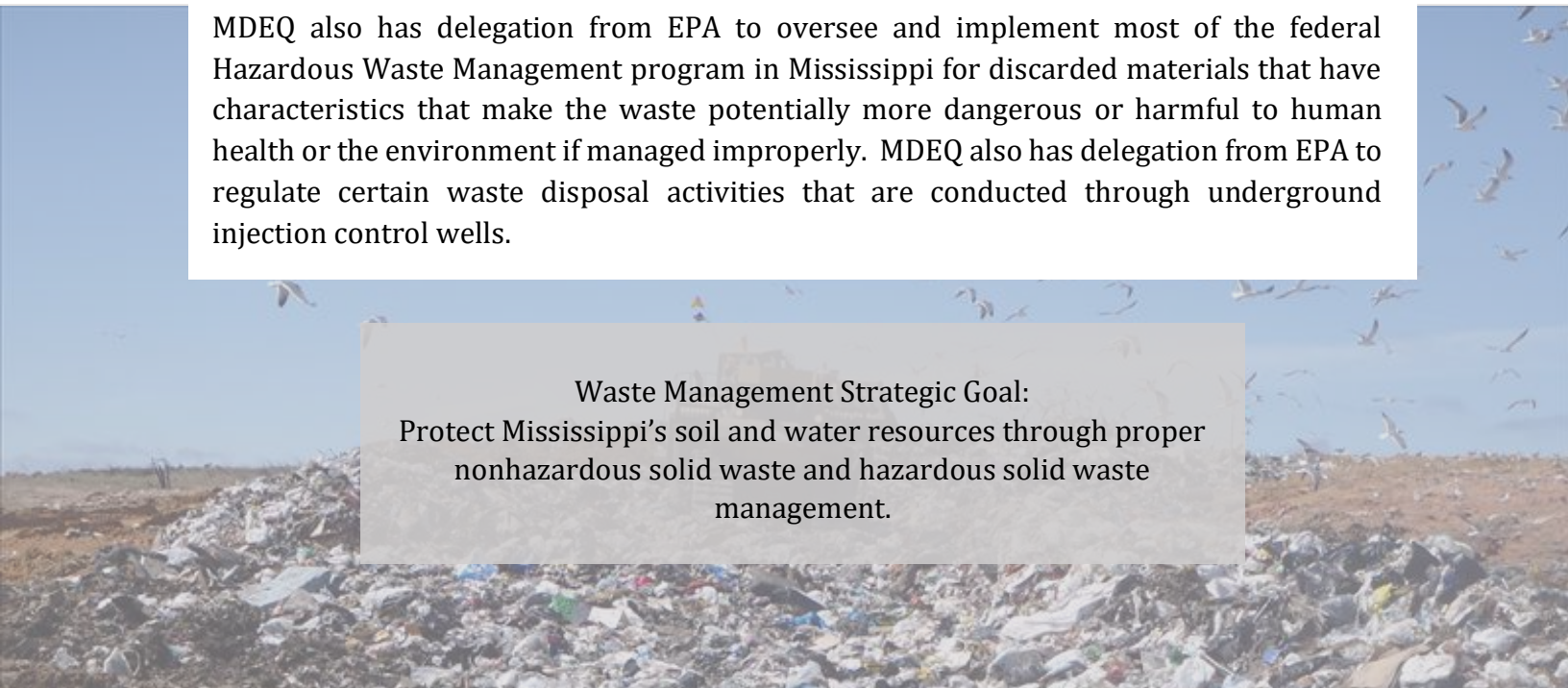
Awarded over $5 million for solid waste management and recycling projects, solid waste planning projects, and waste tire projects.

Hosted two E-Waste collection days.

Removed approximately 2.5 million waste tires from historic and random dumpsites.

MDEQ is responsible for ensuring that solid wastes generated in the state are managed in a manner that is protective of the environment and human health. Solid wastes include all types of garbage, refuse, debris, sludge, or other discarded materials from residential, commercial, industrial, and institutional sources. The Mississippi Legislature has declared it to be the policy of the state that the generation of waste should be reduced or eliminated at the source, whenever feasible; waste that is generated should be recycled or reused, whenever feasible; waste that cannot be reduced or recycled should be treated in an environmentally safe manner; and, disposal or other permitted release into the environment should be employed only as a last resort in an environmentally safe manner. MDEQ regulates the management of solid wastes at storage sites, transfer stations, composting operations, recycling facilities, processing facilities, rubbish sites, landfills, and other types of solid waste facilities.

MDEQ also has delegation from EPA to oversee and implement most of the federal Hazardous Waste Management program in Mississippi for discarded materials that have characteristics that make the waste potentially more dangerous or harmful to human health or the environment if managed improperly. MDEQ also has delegation from EPA to regulate certain waste disposal activities that are conducted through underground injection control wells.



Waste Management Strategic Goal:
Protect Mississippi's soil and water resources through proper nonhazardous solid waste and hazardous solid waste management.

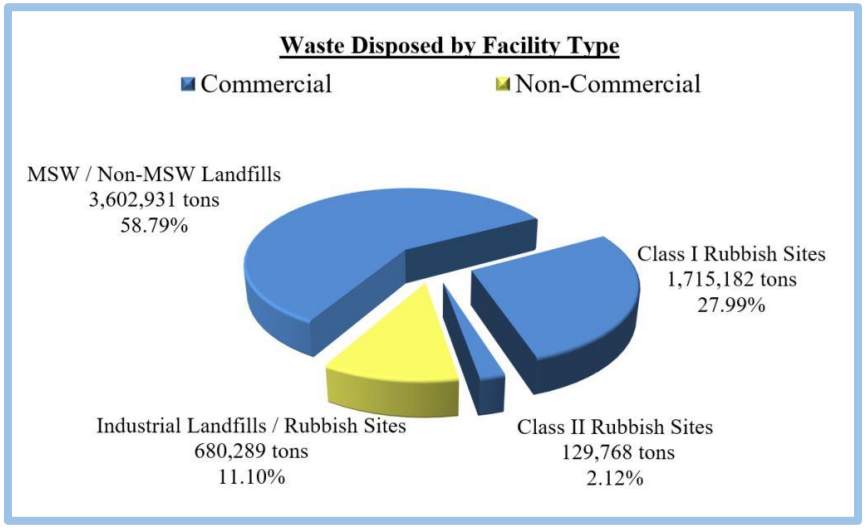
Mississippi Solid Waste Management and Disposal

MDEQ's Nonhazardous Solid Waste programs ensure the proper management of solid wastes, promote the reduction and recycling of solid wastes, and plan for future solid waste management needs.

In early 2022, MDEQ collected annual reports from facility owners for the solid waste management activities conducted. These reports indicate that just over 6.1 million tons of wastes were disposed at permitted landfills and rubbish sites in 2021. Approximately 5.4 million tons were disposed at commercial facilities with over 3.6 million tons (66 percent) disposed at commercial landfills and approximately 1.8 million tons (34 percent) at commercial rubbish sites. Approximately 680,000 tons of the total wastes were disposed at non-commercial disposal facilities. Solid waste disposal facilities received just over 1.1 million tons of waste from out-of-state sources representing approximately 18 percent of the total waste disposed at solid waste disposal facilities.

In addition, a total of approximately 14,000 dry tons of wastes were applied at permitted land application sites in 2021, and over 36,000 tons of material were received at solid waste composting and mulching facilities. The 2021 annual reports also indicated that over 125,000 tons of material was received for management at solid waste processing facilities and nearly 979,000 tons of wastes was managed by solid waste transfer stations.

MDEQ utilizes the Re-TRAC Connect Software platform to collect solid waste annual reporting information, and the agency has mandated that all annual reports be submitted electronically. MDEQ has assisted solid waste facility operators in getting registered and set up to file the electronic annual reports and will continue to assist any operator with these new requirements.



Recycling and Waste Reduction

Mississippi's recycling programs and the recycling industry have continued to experience challenges due to the COVID-19 pandemic, supply chain problems and the ongoing unpredictability of international market conditions. Many local governments in Mississippi and across the nation have made difficult decisions to cut or reduce services such as recycling. The impact has also been evident as well in material recovery facilities in Mississippi and neighboring states. Early during the pandemic, MRF facilities experienced difficulty marketing some materials as manufacturing activity slowed in some sectors. Despite these challenges, MDEQ has continued to work to promote and sustain recycling in the anticipation that the demand for recyclables will improve. This past year has shown marked improvements as the demand for materials has increased with development. The market value of materials such as cardboard, mixed paper, and #1 and #2 plastics have seen increases. In addition, Fortune 500 companies have continued to invest in the U.S. recycling infrastructure.

In the past Fiscal Year, MDEQ's Recycling Program continued the Statewide Recycling Reporting and Measurement Program implemented in 2019. Mississippi state law sets a waste reduction goal of 25 percent for the state, and mandates that local governments develop and implement a waste reduction strategy as a part of local solid waste plans. Historically, Mississippi has had no formal means of measuring recycling rates; however, with this measurement program, MDEQ is beginning to collect solid waste and recycling data from local governments. As participation in the program grows, this data will be used to measure the state's progress toward reaching the 25 percent waste reduction goal. In addition, these local governments will have information and tools to determine the success of their recycling programs and to build more sustainable and efficient solid waste and recycling services for their citizens.

These recycling data collection efforts continue to be conducted on a voluntary basis with plans to transition towards more formal reporting of recycling program information. In gathering this data, MDEQ has continued a partnership with Emerge Knowledge Design, Inc. and The Recycling Partnership to employ the Municipal Measurement Program, an electronic reporting system. The MMP is provided through the Re-TRAC Connect Software platform and was launched in 2019 for reporting 2018 data which provided a convenient fit for Mississippi's reporting needs. This year, MDEQ again reached out to those cities and counties which are known to have active recycling programs and about a third of those communities entered 2021 data. The information may also be used in evaluating how state recycling grant funds may be distributed for cooperative projects by local governments to collect, transport, process, and market recyclable materials.

Given the supply chain problems, global pandemic and challenging market conditions, Mississippi has experienced a decline in the number of active, local recycling programs as well as active recycling businesses over the past three years. These reductions in recycling services have contributed to a reduction in the percentage of the population that has access to community recycling programs. The most recent rate has been approximated at around 55 percent of the state's population, and of this 55 percent, approximately half of the residents with recycling access are provided curbside recycling services with the remaining half having access to drop-off recycling services. In addition, the 40 percent or more of the state's population that do not have access to community-based programs may have some alternate access to recycling through commercial recycling businesses, non-profit recycling programs, or other organizations. For example, in recent years a number of subscription curbside recycling services have been started in various areas of Mississippi. The types of materials and frequency at which these items are collected vary slightly depending on the company, the area of operation, and customer preferences.

MDEQ has continued to promote local government recycling programs and encourage cooperative efforts among local governments to collect, process, and market recyclables. During Fiscal Year 2022, the Waste Division continued working towards the development and release of a new Funding Opportunity Announcement for a second round of grant funding under the Regional Recycling Cooperative Grants program. Grant funding in excess of $1 million was previously awarded in 2014 to local, cooperative recycling efforts led by the Cities of Oxford, McComb, Greenwood, and Natchez. These MDEQ recycling grants helped to develop new and upgrade existing local recycling programs. MDEQ anticipates a new FOA could be released in Fiscal Year 2023.

In addition, MDEQ has continued to encourage public participation in local recycling programs by expanding information available to the public on how, where, and what they can recycle in their community. The State Recycling Directory on the MDEQ website identifies local governments, businesses, institutions and other organizations that provide recycling services to the public for paper, plastics, metals and glass. The information in the directory is periodically updated to address changes, new recycling opportunities, special waste recycling services and other materials that may not be collected through the traditional recycling programs.

MDEQ has also developed an updated listing of materials recovery facilities in Mississippi and adjacent states to provide local governments with information on the best available options for managing recyclables. MDEQ is also developing a new recycling transfer station guidance document to provide information on facilities for managing and improving the collection and transport of recyclables to receiving MRFs and end-users.

MDEQ has also continued to lead by example with its agency recycling program updating and promoting the internal office recycling program to make recycling as convenient as possible for employees. These improvements ensure both increased quantity and quality of recyclables. The program is promoted through recycling signage and guidance throughout MDEQ's facilities and through various employee meetings and new employee orientation activities. MDEQ uses its recycling program to promote and encourage other state agencies to enhance or revive their recycling programs and is available to assist them.

The Waste Division also works with various external partners to provide education and outreach on the importance of sustaining and growing recycling in Mississippi and provides training and technical resources to recycling professionals. One of the agency's key partners is the Mississippi Recycling Coalition, a non-profit consortium of local governments, state agencies, industries, institutions, businesses, trade organizations and non-profit groups working together to promote and grow recycling. Other partners include Keep Mississippi Beautiful and its local affiliates, the Mississippi Beverage Association, the Mississippi Municipal League, the Southeast Recycling Development Council, the Mississippi Manufacturers Association and various other local, state, regional and national organizations.

Solid Waste and Waste Tire Grants Programs

The Waste Division manages various solid waste and waste tire assistance grant programs. MDEQ awarded over $5 million in Fiscal Year 2022 for solid waste management and recycling projects, solid waste planning projects, and waste tire projects. Of that total, over $2.1 million was awarded in Solid Waste Assistance Grants to local governments for projects that involved clean-up of illegal dumps, establishment of collection programs for bulky wastes and recyclables, funding support for employing local solid waste enforcement officers, provision of household hazardous collection programs, conducting public information efforts on solid waste and recycling programs, and various other local waste management projects.

Grant Awards for Fiscal Year 2022

- 39 counties were awarded a total of $926,339 through the non-competitive (or allocated) solid waste assistance grants program.

- 28 additional local governments, including municipalities, counties, and solid waste authorities, were awarded a total of $1.1 million in competitive SWAG grant funds.

- 31 local governments were awarded $2.9 million in waste tire assistance grants.

- A waste tire recycling/research incentive grant in the amount of $1,382,019 was issued to a Mississippi company currently processing waste tires for recycling for the purchase of new equipment to improve the capacity for creating recycled products from waste tires generated in Mississippi.

- Three local governments were awarded a total of $90,780 to fund efforts to develop updated, local comprehensive solid waste management plans.

Solid Waste Planning

The Solid Waste Program works with local governments to develop and implement long-range local solid waste management plans. Each local government is required by state law to develop and implement these comprehensive local, solid waste management plans for a 20-year period. Many of these plans have reached the end-of-life and have been or are in the process of being updated.

During Fiscal Year 2022, MDEQ continued to review drafts of new or comprehensively updated plans for the Golden Triangle Solid Waste Management Authority and the Northeast Mississippi Regional Solid Waste Management Authority as well as the counties of Coahoma, Grenada, Hancock, Holmes, Lauderdale, Leflore, Pearl River, Tunica, and Warren as well as the cities of Jackson and Ridgeland with several plans expected to be finalized for Commission approval in Fiscal Year 2023. In addition, efforts to comprehensively update solid waste plans were initiated for Lamar County and the Three Rivers Regional Solid Waste Management Authority with several other local governments preparing to initiate their comprehensive plan updates in Fiscal Year 2023.

Local governments also made decisions in Fiscal Year 2022 to significantly alter or modify their plans to add new facilities or to alter the direction of programs and services. MDEQ reviewed the modifications to these existing local plans to assure adequate disposal services and capacity and consistency with state law. Communities that completed modifications in Fiscal Year 2022 include Marion County, Rankin County, Simpson County, Tate County, and

the Pine Belt Regional Solid Waste Management Authority. Additionally, MDEQ is continuing review of requests for plan modifications for the counties of Pearl River and Tate.

Waste Tire Management Program

The Waste Tire Management Program develops, implements, and promotes the state's strategy to recycle waste tires. The program's success is reflected in the most recent annual program information indicating an overall waste tire recycling rate of 90 percent for all tires collected for processing, and the recycling rate for waste tires generated in the state that were processed was over 86 percent. It is anticipated that the state's rates will continue to exceed the current national average of approximately 81 percent. Overall, waste tire processors managed approximately 4.2 million waste tire equivalents with approximately 49 percent of the tires being imported from out-of-state sources during Calendar Year 2021.

The state's network of waste tire transporters and waste tire management facilities consists of 96 licensed waste tire haulers, 140 local government waste tire collection sites, and seven active commercial waste tire processing and collection facilities. Collectively, approximately 6.5 million passenger tires were managed through the waste tire management program for Fiscal Year 2022.

The Waste Tire Program also provides assistance for the clean-up of unauthorized tire dumps and investigates complaints on the mismanagement of waste tires. Since the Waste Tire Abatement program began, MDEQ has removed approximately 2.5 million waste tires from historic and random dumpsites. During Fiscal Year 2022, MDEQ selected and awarded waste tire abatement contracts to contractors to continue performing abatement activities at unauthorized waste tire dump sites.

Electronic Waste Management

MDEQ assists communities, businesses, and private citizens with the proper methods for recycling and disposing of e-waste through a directory of electronic recycling companies and other options for managing and recycling discarded electronics. MDEQ also provides information and resources to support the implementation of the state's Certified Electronics Recyclers law which requires state agencies to use a certified electronics recycler for the end-of-life management of electronic assets.

State law also requires that MDEQ promote the certification of electronics recyclers. MDEQ has continued to promote certification programs managed by two national organizations, Sustainable Electronics Recycling International (formerly R2 Solutions) and the Basel Action Network. These two organizations provide certification of recycling businesses that collect and recycle used electronic products in a safe and responsible manner. MDEQ encourages communities, businesses and local and state agencies to consider the benefits of using an electronics recycling company certified under one of these programs.

MDEQ provides grants to communities to sponsor e-waste collection events or programs for the public, often as part of larger household hazardous waste collection events. MDEQ also continued its partnership with the Greater Jackson Chamber Partnership helping to promote and staff electronic collection events in the Jackson Metropolitan area.

MDEQ continued its support for the computer refurbishment program conducted at Jackson State University with grant support to assist in the collection and restoration of used computers. The program collects used computers then donated to low-income families, churches, summer programs, nonprofit organizations, or day care centers, and it provides technical training to young adults on computer repair and restoration.

MDEQ hosted two E-Waste Days in Fiscal Year 2022.

Medical Waste Management

Commercial Medical Waste

MDEQ shares regulatory authority with the Mississippi State Department of Health for medical waste management. This includes oversight of medical wastes collected and transported from health care facilities and veterinary care facilities, emergency and trauma response, business and institutional clinics, and medical wastes generated in private residences through home healthcare. In addition, MDEQ oversees commercial medical waste management facilities of three existing commercial autoclave facilities actively operating for the treatment of infectious medical wastes.

Household Medical Sharps

MDEQ oversees a statewide sharps collection program and an associated educational program for the safe disposal of medical syringes, needles, lancets and other devices generated within the home. Local pharmacies, fire stations, and other businesses volunteer their locations as convenient drop-off stations for the public. During Fiscal Year 2022, 13,391 pounds of household medical sharps were collected through this program, a 13 percent increase from the previous fiscal year. Eight new businesses registered during FY 2022 as drop-off collection stations. With a total of 340 collection stations statewide, Mississippi leads the nation in the number of household sharps drop-off locations per capita.

Pharmaceutical Waste

MDEQ encourages the proper management of pharmaceutical wastes and discourages flushing or washing of household medications and other similar products down a toilet or sink. The Mississippi Department of Public Safety offers ten drop box locations at various offices of the Mississippi Highway Patrol and other local law enforcement agencies offer drop boxes for collection of prescription drugs and expired pharmaceuticals. The U.S. Drug Enforcement Administration also offers periodic drug take-back events in partnership with local law enforcement.

Organic Wastes

MDEQ promotes the reduction, recycling and proper management of organic wastes that originate from plants or animals and are biodegradable such as grass clippings, leaves, limbs and woody debris, food wastes, biosolids and other organic sludges, animal manure, and certain commercial and industrial woody or plant-based wastes. The reuse or recycling of organic wastes involves processes such as composting, mulching, anaerobic digestion, and land application of the wastes for soil amendment purposes.

Composting and Mulching

Annual report information from composting and mulching facilities indicated that over 36,000 tons of wastes were collected and processed as compost or mulch in 2021. MDEQ has continued to work towards streamlining and simplifying the state's composting and processing facility regulations and permitting process.

Biosolids Land Application

The Waste Division utilizes the Biosolids Land Application General Permit to issue permit coverage for various biosolids projects. The permit offers a streamlined mechanism for eligible biosolids use projects and provides for a more efficient permitting process while maintaining appropriate environmental safeguards on the soil amendment use of these materials. In Fiscal Year 2022, over 14,000 tons of biosolids were land applied as an agricultural soil amendment. In addition, MDEQ's Beneficial Use program allows for the soil amendment use of Exceptional Quality biosolids, and a number of Beneficial Use Determinations have been approved for such use of biosolids.

Landfill Methane Outreach Program

MDEQ maintains a partnership with EPA through the Landfill Methane Outreach Program to promote the use of landfill gas as an alternative energy source. Landfill gas is a byproduct of the decay of municipal solid wastes in landfills and contains methane--a potent greenhouse gas that can be captured and used to fuel power plants, manufacturing facilities, vehicles, homes, and more. Mississippi currently has six active landfill gas-to-energy projects, including direct industrial use, at Waste Management's Pecan Grove landfill (Pass Christian), the Golden Triangle Regional landfill (West Point), the Three Rivers Regional landfill (Pontotoc), Waste Management's Prairie Bluff Landfill (Houston), the renewable natural gas project operated by Air Liquide Advanced Technologies US using landfill gas from the Northeast Mississippi Regional Landfill (Walnut), and the landfill gas-powered leachate evaporator also at the Prairie Bluff landfill.

By-Product Beneficial Use Program

The Waste Division promotes the beneficial use of nonhazardous by-product materials that would otherwise be disposed of in landfills or managed under a solid waste management permit. The state's beneficial use regulations allow for industries and other waste generators to request that their non-hazardous industrial by-product materials be evaluated for use in the place of products or raw materials. If MDEQ's evaluation of a beneficial use request confirms that the material has suitable physical and chemical properties for the proposed use, then the agency issues a Beneficial Use Determination (BUD) that exempts the specific use of the material from solid waste management permitting requirements. One of the conditions of a BUD is that the responsible person must annually report on the uses conducted during the state for the calendar year.

Annual report figures provided to MDEQ indicated that BUD holders distributed over 801,000 tons of by-product materials for beneficial uses in calendar year 2021. Over 82 percent of the by-products distributed were used for construction purposes while approximately 18 percent of materials were used in soil amendment applications.

MDEQ works with generators and suppliers of these by-products who provide by-product materials for uses in construction, agricultural soil amendment and other applications. The agency also works with industries and waste generators to authorize beneficial use "demonstration projects" that allow an industry or company to conduct a short-term pilot project using the material to demonstrate the suitability of the material for longer term use. During Fiscal Year 2022, MDEQ approved three new BUDs for new by-product materials with proposed uses as soil amendments as well as a one-time beneficial use for a by-product use as a soil amendment.

MDEQ is currently in the process of evaluating additional requests for beneficial uses including proposals for the use of egg hatchery waste, coal combustion ash, spent sandblasting media. The agency is evaluating whether the proposed uses of these materials meet the state's minimum criteria for a beneficial use determination.

Solid Waste Training and Certification Programs

MDEQ partners with the state and national chapters of the Solid Waste Association of North America to provide training and certification to commercial solid waste landfill operators. MDEQ issued certificates for six new landfill operators and eight renewals for existing landfill operators. At the end of Fiscal Year 2022, there were 40 active commercial landfill operator certifications.

MDEQ also offers a state-developed certification program for commercial Class I rubbish site operators. MDEQ conducted a virtual rubbish operator training class in Fiscal Year 2022, followed by an in-person examination session. MDEQ issued certificates for 18 new rubbish operators and 28 renewals for existing rubbish operators. At the end of Fiscal Year 2022, there were 127 active Class I rubbish site operator certifications.

MDEQ promotes training opportunities offered through SWANA for continuing education for landfill and Class I rubbish site operators. Fall and spring conferences were held by the state chapter of SWANA and MDEQ staff provide assistance and support with these events where needed.

Mississippi Corrective Action Trust Fund

The Waste Division administers the Mississippi Nonhazardous Solid Waste Corrective Action Trust Fund (CATF) to evaluate or address problems at historic landfills. The CATF provides an opportunity for financial assistance to the landfill site owners to conduct preventative or corrective actions at municipal solid waste landfills that closed prior to the effective date of the Federal Subtitle D Regulations. A landfill owner can request assistance from the fund for actions related to either a known release or to evaluate or assess a potential release of contaminants from the landfill. The uses of the funds could include monitoring or abating problem conditions such as onsite or offsite impacts from potential groundwater contamination or landfill gas migration or remediating other forms of contamination at an eligible landfill site.

In Fiscal Year 2022, work continued on a previously approved corrective action project with the City of Laurel to relocate, stabilize, and properly cover historic wastes at a closed city landfill at the city's Sportsplex property. MDEQ also awarded additional funds from the CATF

to the city to secure suitable materials for the final cover system, since the property will be utilized for public sporting events with a total awarded of over $714,000.

Hazardous Waste Management Program

MDEQ's Hazardous Waste Management Program ensures that hazardous wastes are managed, treated and disposed of in a manner which protects communities and the environment. MDEQ is authorized by EPA to manage and implement the Hazardous Waste Program, and EPA exercises oversight of the program to ensure it is implemented in accordance with federal regulations--the 2022 Resource Conservation and Recovery Act Grant Work Plan and the 2015 Memorandum of Agreement for the RCRA Hazardous Waste Management Program. On May 26, 2022, the Commission on Environmental Quality approved revised regulations to adopt ten hazardous waste rulemakings by EPA. Hazardous waste program elements of permitting, compliance and enforcement and regulation adoption are consolidated in the Hazardous Waste Management Program.

Currently, there are three permitted operating facilities which treat or store hazardous wastes. There are also 16 permitted facilities conducting remediation and post-closure activities for historic hazardous waste units. MDEQ also provides compliance oversight, as well as outreach for hazardous waste generators, and currently approximately 131 large quantity generators and 282 small quantity generators are operating in Mississippi. The MDEQ Hazardous Waste Program met its compliance oversight obligations as per the EPA program delegation requirements conducting 46 inspections of hazardous waste management facilities during federal Fiscal Year 2022. In addition, the Hazardous Waste Branch provides support to the agency's Household Hazardous Waste Grants program coordinating additional MDEQ staffing support to local community events.

Underground Injection Control Program

MDEQ's Waste Division administers the agency's underground injection control program overseeing the disposal of certain nonhazardous and hazardous aqueous industrial wastes by deep well injection practices. MDEQ is the designated regulatory authority by EPA for the protection of underground sources of drinking water through the regulation of Class I, III, IV, and V Underground Injection Control wells. The MDEQ UIC program is managed by the Geotechnical Programs Branch in the Waste Division. Class II wells are regulated by the Mississippi State Oil and Gas Board as delegated by EPA and state law. In addition, the Mississippi Legislature recently acted to amend state law to clarify that the regulation of Class VI UIC wells (wells used for carbon sequestration) would be delegated to the

Mississippi State Oil and Gas Board and to direct that agency to seek primacy for the implementation of the Class VI well program from EPA in coordination with MDEQ. The development of a memorandum of understanding between the two agencies and EPA is underway.

The UIC program responsibilities in the protection of underground sources of drinking water include the regulation of 11 permitted Class I UIC wells and over 7,500 class V wells. MDEQ also has regulatory authority over Class III and Class IV wells, but no wells of these classifications exist in the state. The UIC program did not permit any new wells during the year. In addition, the program continued its oversight of the state's first commercial nonhazardous underground injection control well facility operating in Amite County for the disposal of nonhazardous municipal landfill leachate and other wastewaters from oil and gas exploration and production.

Recycling and Waste Reduction Branch Outreach

- On July 15, 2021, the Recycling and Waste Reduction Branch staff conducted a teacher workshop in DeSoto County.
- Waste Division staff attended as well as assisted in planning and execution of the Mississippi Chapter of the Solid Waste Association of North America) with their 2021 annual Fall Conference October 12-14, 2021, in Natchez. The event allowed MDEQ staff to engage with public and private representatives of the solid waste and recycling industries.
- The Waste Division helped sponsor and staff an e-waste collection event with the Greater Jackson Chamber Partnership, Keep Mississippi Beautiful, Keep Jackson Beautiful, and Magnolia Data Solutions on October 29, 2021 at the Farmers Market in Jackson, MS. A Spring event was also held at the same location April 29, 2022. The two events saw over 12,000 pounds of electronic waste collected for recycling.
- MDEQ Waste Division staff provided promotional materials to and participated in the Mississippi Boys Choir 5K Run/Walk held November 6, 2021.
- Waste Division staff conducted the Rubbish Site Operator Training Class on November 9, 2021 via virtual platform providing an online opportunity for new operators to receive certification and current operators to receive Continuing Education Units to meet recertification requirements.
- In celebration of America Recycles Day on November 15, 2021, staff presented information on recycling to students at Mississippi State University.
- Waste Division staff participated in a virtual Lauderdale County Solid Waste Management Plan advisory committee meeting on November 19, 2021 to hear questions regarding a proposed solid waste transfer station to be sited in the County and provide information on the solid waste management planning and permitting processes. Advisory committees consist of citizens and representatives of local businesses and allow local governments to better engage with the public as they work to develop new and updated comprehensive solid waste management plans.
- Recycling and Waste Reduction Branch staff conducted presentations and participated in roundtable discussions on November 29, 2021 with Hazelhurst Elementary School teachers and staff in preparation for their recycling program kick-off.
- The State Recycling Coordinator participated in a panel discussion as part of the Southeastern Recycling Development Council's virtual annual meeting, November 30-December 1, 2021.
- The Waste Division's Policy, Planning and Special Programs Branch staff participated in a virtual roundtable discussion on December 15, 2021, with other state waste tire program managers within EPA Region 4 to discuss state program goals and issues regarding end use markets for waste tires.
- On February 15, 2022, recycling branch staff presented to 2022 Envirothon participants at the Brandon Civic Center in Brandon, MS.

- As part of Neshoba County's Conservation Carnival, recycling branch staff presented to students over the two-day event held February 23-24, 2022.
- Waste Division staff attended as well as assisted in planning and execution of the Mississippi Chapter SWANA with their 2022 annual Spring Conference April 12-14, 2022 in Biloxi, MS. The event allowed MDEQ staff to engage with public and private representatives of the solid waste and recycling industries.
- In promotion of Earth Day, the State Recycling Coordinator presented recycling information to environmental science students at Delta State University on April 19, 2022.
- MDEQ Waste Division Staff, promoted recycling, waste reduction and proper waste management at the University of Southern Mississippi's annual Earth Day Fair on April 20, 2022.
- On April 28, 2022, the State Recycling Coordinator served as a judge for 2022 Envirothon Competition held in Raymond, MS.
- In celebration of World Environment Day, the State Recycling Coordinator conducted a virtual presentation at the Canton, MS library on June 1, 2022.
- Jackson Public Schools works with an organization called The Bean Path to help introduce sustainability to students and teachers. On June 6, 2022, MDEQ recycling branch staff presented information on recycling, waste reduction and proper waste management as part of these series of discussions.
- Waste Division staff participated in the virtual Region 4 EPA and States Sustainable Materials Management, Solid Waste, and Pollution Prevention Annual Meeting June 6-9, 2022 focusing on various regional and national issues related to solid waste management. Not held in-person due to COVID-19, this meeting is a key meeting for exchange of ideas and information with surrounding states and EPA, and the Waste Division programs use information and ideas gleaned from the meeting to help in the development of outreach goals as well as program implementation.
- On June 23, 2022, the Recycling and Waste Reduction Branch staff conducted a teacher workshop in Pontotoc County.

MDEQ's public outreach efforts are aimed at assisting citizens, schools, businesses, industries, and others learn about required and recommended actions to protect the environment and public health.

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Pollution Prevention Program

The MDEQ Pollution Prevention Program is coordinated by the Waste Division with the various air, water, and waste environmental media programs in the agency. The P2 program coordinates multiple activities focusing on the reduction of wastes at the source that can impact the environment. The Mississippi P2 program efforts are supported in part by a Pollution Prevention Grant from EPA which provides the state with additional resources to assist industries, businesses and government agencies and institutions with pollution prevention and waste minimization efforts such as:

- Providing information and technical assistance to businesses and industries, environmental consultants, local governments, state and federal agencies, and system operators on hazardous and non-hazardous waste management and pollution prevention practices.

- Supporting the Mississippi Economy, Energy, and Environment initiative which includes projects, programs and efforts designed to focus on sustainability and the triple bottom line of energy, environment, and the economy.

- Reviewing, managing, and monitoring the waste minimization plans, annual waste minimization certified reports, and the calculation of the annual P2 fees for Toxic Release Inventory Form Filers and Hazardous Waste Generators.

- Providing administration and implementation of the agency's environmental stewardship recognition program entitled: Envision Heightened Awareness Nurturing Conservation and Environmental Excellence. EnHance recognizes the manufacturers, businesses, governments and institutions that goes above and beyond standard environmental requirements.

- Coordinating and partnering with state and the federal government agencies and non-governmental entities to promote effective pollution prevention practices.

The conditions of the COVID 19 pandemic created challenges for the P2 program to continue its many of its assistance and outreach program efforts over the past state fiscal year. However, the MDEQ P2 Program was able to accomplish a number of important tasks including the following:

- The P2 Program continued the agency's strong partnership with the Mississippi Manufacturing Association through a renewed contract and work order with MMA's

Manufacturing Extension Partnership to assist in providing the P2 and E3 technical assistance program for Mississippi manufacturers.

- The P2 program reviewed and monitored 198 annual waste minimization certified reports submitted by various industries and facilities around the state.

- The P2 program reviewed and processed applications for 2022 class members for the enHance environmental stewardship recognition program.

- The P2 program hosted a virtual enHance Leadership Roundtable on February 2022. The Leadership Roundtable provided an opportunity for enHance members to share successes and challenges related to environmental issues at their respective facilities. In addition, planning for the upcoming annual enHance workshop was discussed and a subcommittee was established to assist in planning of for the August workshop event.

- The P2 Program and MDEQ personnel participated along with EPA's Region 4 and EPA's headquarters members in the first Region 4 Pollution Prevention Awards Program presentation site visits at Siemens Energy, Inc. on April 29, 2022. Siemens Energy, Inc was the first company in Mississippi to be awarded this award. In 2019 Siemens Energy completed two projects that improved process efficiency and reduced electricity use. Together, the two projects resulted in over 260,000 KWh of annual electricity savings and 239,000 pounds of annual CO2 equivalent avoidance. The purpose of the P2 Award Program is to recognize organizations whose P2 successes exemplify environmental excellence and innovation. Success stories can encourage other entities to consider implementing P2 approaches. Organizations (businesses, companies, facilities, etc.) currently compliant with all applicable environmental regulations are eligible to apply for this non-monetary, recognition award. Nissan North America was also visited by the group on the same day as a potential candidate for future Region 4 Pollution Prevention Awards.

- The P2 Program hosted an in-person RCRA Waste Management, Waste Minimization and Pollution Prevention Training at MDEQ for the Hol-Mac Corporation's 5 facilities on May 25, 2022. The training focused on identification of hazardous waste at the point of generation, waste profiles, requirements for storage, treatment and disposal of hazardous waste, manifest requirements, universal waste, contingency plan and quick reference card, RCRA training, labeling, pending waste amendments, and best pollution prevention practices.

- The P2 program worked with the MMA- Manufacturing Extension Partnership to update the Energy, Economy, and Environment Framework to better serve Mississippi manufacturers and branded the new framework as ME3.

- The P2 Program work through the ME3 team to complete an E3 assessment for Anel Corporation on November 17, 2021, and Solar Group Inc., Plant Number 2 on January 21, 2022.

- The P2 Program convened the enHance Planning committee on several occasions in the Spring and early Summer of 2021 to plan and seek input on the annual enHance workshop to be held in State fiscal year 2022. The committee identified key topics and speakers focused on sustainability issues for manufacturers. These meetings helped develop the theme and the content of the 2022 enHance workshop.

enHance Environmental Stewardship Program

The P2 program sponsors the agency's environmental stewardship recognition program, enHance. The enHance program has grown to 34 active members representing top environmental performers throughout the state. enHance is a voluntary stewardship program that recognizes committed environmental leaders who accomplish goals beyond their standard regulatory requirements. enHance is open to manufacturing facilities, cities, counties, and other organizations who are interested in the program and meet the eligibility requirements. Applicants can choose to apply for membership at three tier levels: Leader, Steward, or Associate.

In the class for 2022, MDEQ accepted two new members and ten renewing memberships into the enHance program the class of 2022. The new and renewing members added for this past year were as follows:

Anel Corporation	Winona	LEADER
Hol-Mac Corporation Plant #1 (South)	Bay St. Louis	LEADER
Hol-Mac Corporation Plant #2	Bay St. Louis	LEADER
Hol-Mac Corporation Plant #3	Bay St. Louis	LEADER
Huntington Ingalls Incorporated	Pascagoula	LEADER
Siemens Energy, Inc.	Richland	LEADER
Haworth Inc.	Bruce	STEWARD
PACCAR Engine Company	Columbus	STEWARD
Southwire Company	Starkville	STEWARD
Yokohama Tire Manufacturing Mississippi	West Point	STEWARD
Airbus Helicopters, Inc.	Columbus	ASSOCIATE
Keith Huber Corporation	Gulfport	ASSOCIATE

This past year marks the thirteenth year of the enHance program. In the past year, members' projects have resulted in over 60,000 pounds of solid waste being reduced, 30 million gallons of water saved, and the reduction of 130,000 MMBTU in energy use. EnHance members also reported more than $395,000 saved and reductions in total air emissions of more than 183,000 tons. Over the past 13 years, the enHance program members have achieved the following total reductions to pollution and wastes:

- Eliminated 325,000 pounds of hazardous waste.
- Reduced, reused, or recycled 1.5 million pounds of solid waste.
- Saved more than 328 million gallons of water.
- Reduced annual energy use by more than six billion kilowatt hours for nearly 20 million MMBTUs of total annual energy savings.
- Reported cost savings from waste reduction practices of over $9 million.

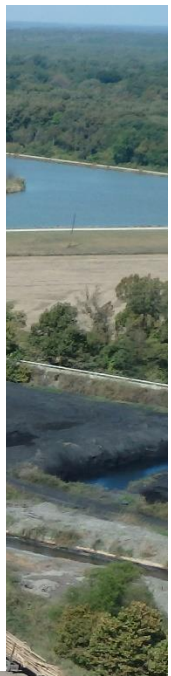
These results have been achieved through changes in operating procedures, redesign of products or packaging, beneficial re-use or recycling of materials, installation of more efficient equipment, and other similar beneficial practices. In Fiscal Year 2022, the enHance program continued to promote these best management practices to encourage more widespread implementation through training sessions, mentoring, and participation.

COMPLIANCE & ENFORCEMENT

The Office of Pollution Control's Environmental Compliance and Enforcement Division implements and oversees the majority of MDEQ's air and water compliance and enforcement activities When a site fails to comply with its permit(s) or regulations, appropriate enforcement action is taken to promptly return the site to compliance.

During Fiscal Year 2022, the following number of air and water on-site inspections were performed by ECED and the Field Services Division:

- 172 for compliance with air pollution regulations and permits.
- 1,025 for compliance with water pollution regulations and permits.



ECED actions resulted in 30 Agreed Orders being issued for non-compliance with air and water regulations and permits. All 30 Agreed Orders contained provisions for a penalty with a total of $846,050. When appropriate, MDEQ allows the use of Supplemental Environmental Projects, projects that go beyond what is required to comply, to offset a portion of a cash penalty. There were no orders utilizing a SEP during Fiscal Year 2022.

ECED, in conjunction with the Field Services Division, is also responsible for responding to citizen complaints regarding air and water matters. During Fiscal Year 2022, MDEQ received and investigated 877 complaints related to air and water matters. When citizens report an environmental problem, they are asked to explain the nature of the problem and give the location of the problem, including directions to the site. A name is not required; however, if a name and contact information are provided, MDEQ either contacts the complainant during the investigation or provides the results of the investigation after the investigation is complete.

WATER QUALITY

Fiscal Year '22 Accomplishment Highlights

Funded eleven new Water Pollution Control Revolving Loan Fund projects totaling $64.1 million.

WPCRLF reached significant milestone of over $1 Billion in total loan awards since program inception.

Issued general permit coverages for 233 new projects and 33 modifications under the large construction stormwater general permit through EPD.

Water Quality Monitoring

MDEQ monitors the quality of surface water throughout the state using collected data compared to the state's water quality standards with determinations made about the health and safety of Mississippi's surface waters. The results of the determinations can be found in the state's biennial Clean Water Act Section 305(b) Water Quality Inventory report. Waterbodies not meeting their water quality standards are placed on the state's Clean Water Section 303(d) List of Impaired Water Bodies for action. Data collected through water quality program are publicly available on request or through EPA's Water Quality Portal.

Water Quality Strategic Goal:
Protect and restore surface and groundwater quality in Mississippi

Water Quality Objective:
Ensure the improvements funded through the Water Pollution Control Revolving Loan Fund Program are adequate to meet the needs of citizens, the business community, and to foster economic growth.

Ambient Recreational Monitoring Network

MDEQ maintains a statewide ambient bacterial monitoring network for the purpose of assessing water quality conditions in streams, rivers, lakes, bayous, and estuaries throughout the state. 51 Ambient Bacterial Monitoring sites are sampled in this network with an additional 21 beach monitoring. The sampling scheme includes the collection of six bacteria samples each station within a 30-day period during contact (May-October) and non-contact (November-April) seasons to obtain a geometric mean criterion for each site.

Ambient Lake Monitoring

MDEQ collects chemical, physical, and biological samples from public lakes throughout the state. The lakes selected are greater than 100 acres in size and are devoid of nutrient enrichment. The program schedule in a triennial cycle so that each lake site has three years' worth of data before a new cycle with different lakes begins

State of Mississippi Water Quality Assessment 2022 Biennial 305(b) Report

Every two years MDEQ is responsible for generating the Water Quality Assessment Report under Section 305(b) of the Clean Water Act. The report comprehensively describes for EPA, Congress, and the public the status of the quality of the state's surface waters. The report also describes the state's assessment methodology and gives the causes, where known, for those waters identified as impaired. The 305(b) report is an overview of how the waters are assessed and what the overall results of these assessments are. The 2022 305(b) report is based on data collected from January 2016 through December 2020. The report also touches on public health concerns such as fish tissue advisories and beach advisories. At the end of the report is an appendix that lists each site sampled between 2016 to 2020 and whether it is attaining or not attaining its designated use or uses. The report can be found at www.mdeq.ms.gov/tmdl.

Mississippi Benthic Index of Stream Quality

The Mississippi Benthic Index of Stream Quality (M-BISQ) is an index of biological integrity that is used to assess all wadeable non-tidal streams in Mississippi except for wadeable streams located in the Mississippi Alluvial Plain. Monitoring efforts completed as part of this effort have greatly increased the number of biological assessments conducted on state waters. The M-BISQ sampling program and the established sampling and analytical methodology contained therein now serves as the foundation for routine biological monitoring in MDEQ's statewide Ambient Monitoring Network. This index was originally developed and calibrated using biological and environmental data collected from 20 years of wadeable stream locations.

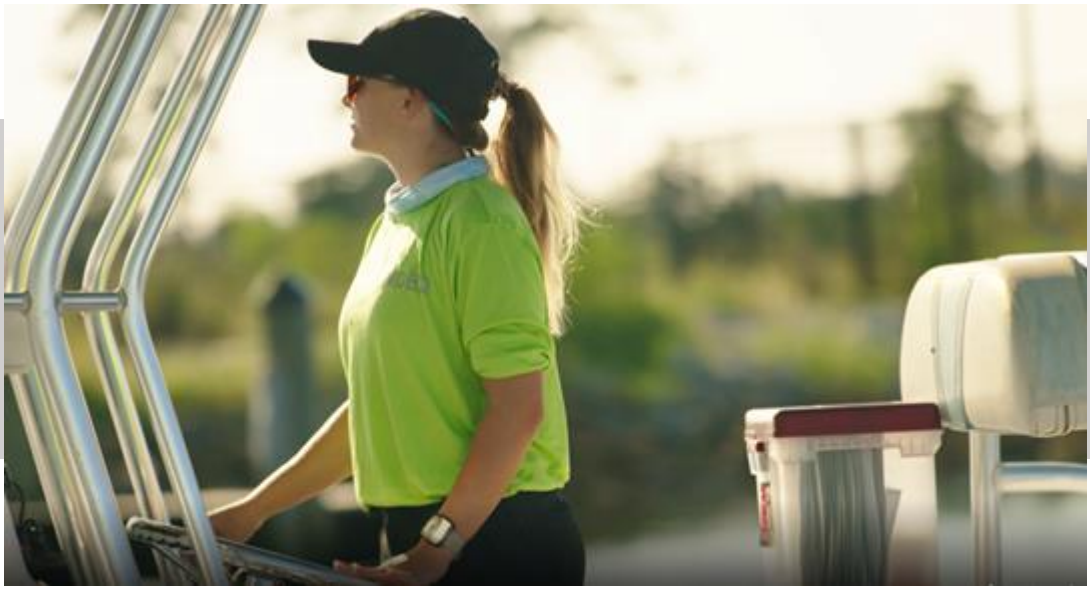
Fixed Station Ambient Monitoring

MDEQ's network of statewide ambient water quality monitoring stations provides systematic water quality sampling at regular intervals and uniform parametric coverage to monitor water quality status and trends over a long-term period. Sampling is carried out by MDEQ scientists from each of the agency's three regional offices.

There are currently 37 stations statewide, and laboratory analyses for the samples are carried out monthly by MDEQ's laboratory.

Fish Tissue Monitoring Program

The MDEQ Laboratory monitors fish tissue for contaminant levels that could be harmful to people that consume fish from the state's waters. When elevated levels of contaminants are found in fish tissue, the data is used by a multi-agency task force to determine if a fish tissue consumption warning or advisory is warranted. Presently, there are advisories for Mercury, DDT, Toxaphene, and PCBs on many state waters. Monitoring is currently focused on these areas to provide additional data that may contribute more information towards evaluating advisories in the Mississippi Delta. 15 lakes were sampled in Fiscal Year 2022.



Coastal Monitoring

Mississippi's Coastal Assessment monitoring is conducted during the late summer index period (July to September) and includes biological, chemical, and physical sampling. The sites are selected using a probabilistic site selection methodology, and 33 sites were sampled in Fiscal Year 2022. At the end of a five-year cycle, a total of 125 sites have been sampled for the coastal monitoring program.

Beach Monitoring Network

MDEQ conducts routine bacteria and water chemistry sampling at 21 beach stations located along Mississippi's Gulf Coast as part of the Mississippi Beach Monitoring Program When Enterococcus bacteria concentrations reach unsafe levels, beach water contact advisories are issued. In addition, the monitoring data provide information concerning the seasonal water quality conditions of the immediately accessible waters along the public bathing beaches.

During Fiscal Year 2022, a total of 58 advisories and two closures were issued for elevated bacteria detected through routine sampling.

Triennial Review of Water Quality Standards

The Clean Water Act requires that each state review their water quality standards at least every three years in a process called the triennial review. Water quality standards must include three components: the designated uses of the state's waterbodies, the water quality criteria necessary to protect those uses, and antidegradation provisions to protect water quality. During the triennial review, that latest science and information available are considered, and when needed, criteria are updated to protect human health and aquatic life.

The last modifications to Mississippi's Water Quality Standards were completed as part of the 2018 triennial review. Revisions to Mississippi's Water Quality Standards as part of the 2018 triennial review included updates to aquatic life criteria, the addition of three new waterbody classifications, and additional language related to the implementation of water quality standards. The required 45-day public comment period for the triennial review began on February 11, 2021. A ten-day extension on the public comment period was requested by stakeholders and granted by MDEQ. Public comments were accepted until April 9, 2021. A public hearing was held regarding the proposed regulations on Tuesday, March 30, 2021. The public was invited to participate, to ask questions of the staff, to gain information regarding the proposed modifications to the regulations, and to present verbal comments on the proposed regulations, if desired.

A Notice of Final Rulemaking was made on July 24, 2021. No response was received to the Notice of Final Rulemaking. The Special Assistant to Mississippi's Attorney General certified in a letter dated, September 24, 2021, that the revisions had been duly adopted according to state law. The triennial review package with proposed revisions was sent to EPA Region IV for their review on October 6, 2021. EPA Region IV approved the proposed triennial review revisions on December 17, 2021.

Water quality standards must include three components: the designated uses of the state's waterbodies, the water quality criteria necessary to protect those uses, and antidegradation provisions to protect water quality.

Total Maximum Daily Load and Modeling

Total Maximum Daily Loads are a requirement of the Clean Water Act to provide direction for restoring the nation's waters. TMDL reports provide an analysis of the ability of a water body to assimilate pollutants from point sources such as industry and communities and nonpoint sources such as stormwater runoff from urban areas or agriculture.

Water bodies that do not meet water-quality standards are identified as "impaired" for the particular pollutant of concern. Under Section 303(d) of the CWA, states are required to develop a list of waters that are not in compliance with water quality standards and establish a TMDL for each pollutant causing the impairment. MDEQ biennially creates a list of these impaired waters called the 303(d) List of Impaired Waters. This list was updated again in 2022 and was approved in February of 2022. MDEQ has completed work on stressor identification (SI) analysis for seven water bodies that have been identified as biologically impaired. The SI process identifies the stressors to water quality for individual water bodies that have been identified as biologically impaired. TMDLs for those water bodies are currently in progress.

Model Calibration Studies

The Pascagoula River and Eastern Mississippi Sound were targeted for model development in 2022 to better inform permitting decisions for facilities that discharge to this area. Model calibration was completed this year and MDEQ took delivery of the model in July.

A study was conducted on Sowashee Creek near Meridian in Lauderdale County. This effort included water quality monitoring for an array of parameters including dissolved oxygen, temperature, and velocity. This information will be used to improve the water quality models used to establish TMDLs and waste load allocations for Sowashee Creek.

Development of the Priority Framework

MDEQ has developed a new collaborative framework for implementation of the Clean Water Act known as the Priority Framework. This new framework coordinates and focuses efforts to advance the effectiveness of the water program. Various environmental factors were adjusted based on professional judgment of the importance of each for characterizing watershed value. Once these factors were developed, standardized, and weighted, a relative ranking of every watershed within the state was produced. This ranking was used to screen watershed for activities that will address the water program goals, and a total of 21 watersheds were chosen as targeted watersheds.

In order to select the priority watersheds, MDEQ used landscape information to calculate metrics on the watershed scale that are used to characterize and rank watersheds by resource value and potential stressors. Resource value is determined using environmental and human welfare data layers. Environmental factors considered include erosion potential, impervious area, wetlands, impaired waters, and concentration and types of discharge permits. Human welfare factors include demographics, fishing advisories, water supply intakes, public water supplies, recreational water bodies, public waterways, national and state parks, and recreational locations.

MDEQ will review the selection process and screening criteria during this two-year listing cycle to choose new targeted watersheds for TMDL development. This list will be published as part of the 2024 Section 303(d) List of Impaired waters. Flexibility will be retained to re-evaluate selections and amend watershed selection in the face of changing state priorities as well as changing EPA national and regional priorities.

Mississippi River and Gulf of Mexico Watershed Nutrient Task Force

MDEQ continues to support the efforts of the Mississippi River and Gulf of Mexico Watershed Nutrient Task Force to understand the causes and effects of increased nutrients in the Gulf of Mexico and coordinate activities to reduce the size, severity, and duration, and mitigate the effects of hypoxia. Activities of the Task Force include coordinating and supporting nutrient management activities from all sources, restoring habitats to trap and assimilate nutrients, and supporting other hypoxia-related activities in the Mississippi River and Gulf of Mexico watersheds.

Nonpoint Source Pollution

Nonpoint Source Pollution is rainwater runoff that picks up and carries away a variety of pollutants as it flows over streets, parking lots, construction sites, and agricultural lands. The pollutants may then flow into rivers, oceans, and underground sources of drinking water. These pollutants include excess fertilizer, sediment, nutrients, pesticides, oil, grease, and bacteria from faulty septic systems.

During Fiscal Year 2022, the NPS Branch managed a total of 43 projects and activities totaling $1.475 million in federal funds. These projects may take from one to four years to complete and include, but are not limited to, education and outreach projects, water-quality monitoring projects, projects that implement Best Management Practices to demonstrate effectiveness of pollution reduction activities, agricultural and chemical waste disposal, and watershed protection and restoration projects.

Basin Management Approach

The goal of Mississippi's Basin Management Approach is to restore and protect water resources of the state through collaborative development and implementation of effective management strategies that help improve water quality and quantity while fostering sound economic growth. In an effort to effectively carry out planning and implementation activities, the ten major river basins in Mississippi have been organized into four basin groups. Each basin group has a basin team comprised of the representatives from federal, state, and local government agencies, non-governmental organizations, and other stakeholders. This program implements strategies that target priority watersheds throughout the state. Prioritization of these watersheds is an evolving process identified in coordination with resource agency partners as part of the Basinwide Approach to Water Quality Management.

The Basin Management and NPS Programs are implemented in cooperation with several agencies, organizations, and groups at all levels of government and in the private sector. A great focus is given to activities that promote consensus building and partnering to increase the overall effectiveness. One key partnership to increase this overall effectiveness is with the USDA Natural Resources Conservation Service. MDEQ and NRCS work collaboratively using Section 319 funds for assessment and monitoring of National Water Quality Initiative sites where the NRCS has or will implement various conservation practices such as cover crops, filter strips, and terraces. In addition, information from the Mississippi Watershed Characterization and Ranking Tool is used to help identify priority watersheds for targeted funding under the National Water Quality Initiative as well as other NRCS funding initiatives.

National Water Quality Initiative

The National Water Quality Initiative was introduced by the NRCS in 2012 as a collaborative effort with EPA and state water quality agencies including MDEQ. NWQI strives to reduce nonpoint sources of nutrients, sediment, and pathogens related to agriculture in small priority watersheds within each state. The watersheds within Mississippi that received funding for Best Management Practices implementation in Fiscal Year 2022 included Carmichael Creek-Town Creek (Basin Group I), Coon Creek-Tuscumbia River Canal (Basin Group I), North Tippah Creek (Basin Group II), Middle Porter Bayou (Basin Group II), Upper Porter Bayou (Basin Group II), Hudson Creek-Clear Creek (Basin Group II), Tilda Bogue-Bear Creek (Basin Group III), Lynn Creek-Homochitto River (Basin Group III), and Booths Creek-Bayou Pierre (Basin Group III). Carmichael Creek-Town Creek, Upper Porter Bayou and Middle Porter Bayou also are active Section 319 project watersheds. NRCS is now requiring all NWQI watersheds (previously existing and new) to have a watershed assessment completed to be eligible for funding.

Stormwater Regulations to Improve Water Quality

MDEQ issues permits covering discharges resulting from rainfall events and the associated stormwater runoff from industrial or commercial sites. These permits focus on avoiding pollutants commingling with stormwater, averting excessive erosion, and preventing contaminated stormwater from entering waters of the state. The permits contain best management plans, monitoring conditions, and operational requirements to ensure stormwater discharges will not cause or contribute to violations of water quality standards or impair any beneficial uses of waters of the state.

In Fiscal Year 2022, MDEQ took the following stormwater permitting actions:

- The Environmental Permits Division reissued the Large Construction Stormwater General Permit which applies to projects that disturb five acres or more of land.

- EPD issued general permit coverages for 233 new projects and 33 modifications under the Large Construction Stormwater General Permit.

- EPD received and processed 43 “No Exposure Certifications” from potentially regulated industrial facilities. Facilities that certify “No Exposure” of industrial activity to stormwater are not required to obtain storm water coverage under the Baseline General Permit.

- EPD issued general permit coverages for 51 regulated surface mining sites under the Mining Stormwater General Permit.

Environmental Operator Training

The training calendar included 70 days of agency-sponsored training classes. Of these training days, 46 were co-sponsored with the three wastewater-related professional associations (Mississippi Water and Pollution Control Operators' Association, Mississippi Water Environment Association, and Mississippi Rural Water Association). Attendance totaled 492 operators, utility managers, and engineers, and certification exams were administered to 155 prospective operators with a total number of 308 new and renewal certificates issued. There were 42 wastewater training requests approved for wastewater continuing education credits in the classroom and online. There are currently 715 certified pollution control operators in the state.

The MDEQ Operators Training program staff have partnered with the Mississippi Rural Water and the Mississippi Water Pollution Control Operators Association to speak at functions for the Mississippi Municipal League with the goal of increasing communication between operators and municipal officials. The training staff also provide onsite technical assistance to municipal, commercial, and industrial wastewater facilities. This assistance program provides "no cost" assistance in returning to or maintaining compliance with their wastewater permit

Water Pollution Control Revolving Fund

The Water Pollution Control Revolving Loan Fund program provides low interest loans to public entities in the state for construction, repair, or replacement of wastewater, stormwater, and nonpoint source pollution projects. Funding for these projects comes from federal grants, state match, repayments, and interest on deposits. Additional subsidy funding is also currently available for "Small and Low-Income Community" WPCRLF projects. During Fiscal Year 2022, MDEQ funded eleven new WPCRLF projects totaling $64.1 million. This resulted in the WPCRLF Program reaching a significant milestone of over $1 Billion in total loan awards since program inception.

Water Pollution Control Emergency Loan Fund

The Water Pollution Control Emergency Loan Fund program provides loans to communities for the emergency construction, repair, or replacement of wastewater collection and treatment facilities. The WPCELF currently has approximately $2.7 million available for such emergency projects. MDEQ encourages communities throughout the state to utilize this program whenever funds for emergency wastewater projects are needed. There was one new WPCELF loan awarded during Fiscal Year 2022.

REMEDIATION

Fiscal Year '22 Accomplishment Highlights

Awarded two EPA grants totalling $2.5 million.

Provdided technical support to 10 cities and districts to conduct assessments and cleanups.

Completed four targeted Brownfield Assessments with expected to be conducted next year.

Provided responses to 34 hazardous site determination requests.

Brownfields

A "brownfield" is a property which may be complicated by the presence of a hazardous substance, pollutant, or contaminant that affects the expansion, redevelopment, or reuse of the property. MDEQ's Brownfield Program allows prospective purchasers and developers, along with existing companies, to assess, remediate, and revitalize these sites. Through the program, companies can coordinate with MDEQ and the Mississippi Development Authority to participate in a redevelopment incentive program to defray the remediation costs associated with cleaning up contaminated properties. To date, 58 companies have participated in the program. This Fiscal Year, MDEQ provided technical support to the Cities of Canton, Greenville, Jackson, Natchez, Vicksburg, West Point, and Yazoo City along with the South Delta Planning and Development District, the Southern Mississippi Planning and Development District, and the Three Rivers Planning and Development District to conduct assessments and cleanups for site redevelopment for locations that have potential or perceived environmental issues. These cities and development authorities received EPA grants to conduct brownfield revitalization projects. In addition, MDEQ approved one Brownfield Ageement, and the Brownfield Party has applied to the Mississippi Development Authority for the Mississippi Economic Redevelopment Act incentives.

Remediation Goal: Protect human health and the environment through proper mitigation, remediation, reclamation, and restoration of natural resources.

In 2022, MDEQ completed four Targeted Brownfield Assessments (TBA) in the cities of Marks, Laurel, Starkville, and Anguilla. TBAs can consist of environmental assessment activities such as Phase one and Phase two, asbestos and lead based paint surveys, and cleanup planning. These TBAs reduce costs and promote redevelopment opportunities for fellow government agencies and private entities as funding allows. MDEQ is excited to announce that during 2022, EPA awarded MDEQ's Brownfield Program with two grants, a ~$1.5 million Brownfield Assessment Grant and a $1 million Brownfield Revolving Loan Fund Grant. In addition, the Bipartisan Infrastructure Law appropriated additional Brownfield funding to States in which MDEQ may receive up to an additional $1.2 million each year over the next five years for Brownfield TBAs. MDEQ is ramping up its TBA program and expects to conduct over 15 TBAs each year over the next five years.

Remediation Objective:
Ensure contaminated sites are properly assessed, remediated, and redeveloped in a manner protective of human health and the environment.

Uncontrolled Sites and Voluntary Evaluation Program

During Fiscal Year 2022, Groundwater Assessment Remediation Division staff actively oversaw 226 assessments and/or cleanups with the total number of sites at 2,202. These 2,202 sites cover all the known and suspected contaminated sites reported to the state since 1967. MDEQ issued "No Further Action" letters for four of these sites that were evaluated and remediated to levels protective of human health and the environment resulting in an additional 364 acres ready for reuse.

MDEQ issued three Restrictive Use Agreed Order/Environmental Covenants, allowing these sites to be reused with certain activity and use limitations. During Fiscal Year 2022, MDEQ provided responses to 34 hazardous site determination requests from local governments and/or development districts to foster economic development and redevelopment and to assist with compliance with National Environmental Policy Act.

The Voluntary Evaluation Program offers an opportunity to receive an expedited review of site characterization and remediation plans and reports for parties that are voluntarily cleaning up uncontrolled sites that they have an interest in. The VEP is funded entirely by these participants who pay for MDEQ's oversight costs. To date, 462 sites have participated in the VEP program, approximately 20 percent of GARD's total number of sites.

Superfund and Federal Facilities Cleanup and Redevelopment

Oversight of the assessment and remediation process at seven federal Superfund sites, seven Department of Defense Facilities, a NASA Facility (Stennis Space Center) and several Formerly Used Defense Sites continue to be a large portion of the work involving the Comprehensive Environmental Response, Compensation, and Liability Act Branch of MDEQ. This oversight work is funded through agreements with EPA, the Department of Defense, and NASA. Through these agreements, CERCLA staff perform preliminary assessments, site investigations and site inspections at hazardous waste sites for National Priority List consideration, coordinate with EPA on emergency/removal projects, and assist EPA with the oversight of the remediation of seven Superfund sites

In 2018, two additional sites, Mississippi Phosphates (Pascagoula) and Rockwell International (Grenada), were added to the National Priorities List. The state will be required to pay ten percent of the remedial costs if a viable potential responsible party is not identified. To date, a viable potential responsible party (PRP) has been identified for Rockwell International.

The Mississippi Phosphates site has no viable PRP identified at this time, and no estimate of future remedial costs has been given to date. EPA is proceeding with ongoing wastewater treatment during cleanup and closure of the East Gypsum Stack with an engineered geosythetic turf. EPA is projecting completion of their responsibilities in 2024, and estimates the state's remedial costs will begin in 2025. The closure of the East Gypsum Stack is being conducted under a Removal Action, which does not require a cost share from the State of Mississippi.

Also, MDEQ was notified that the "Southeastern" NPL site in Canton, MS will be moving forward for remedial activities. As there is not a viable PRP at this site, similar to Mississippi Phosphates, EPA will be conducting the cleanup but has waived Mississippi's cost share related to the cleanup of this site. Between both sites, this will save the State of Mississippi over $20 Million in potential cost share.

In 2022, the Hercules/Ashland site in Hattiesburg, Mississippi has been proposed for the NPL. This site has a PRP that has been identified.

MDEQ issued "No Further Action" letters for four of these sites that were evaluated and remediated to levels protective of human health and the environment resulting in an additional 364 acres ready for reuse.

Underground Storage Tanks

MDEQ manages the state's Underground Storage Tank Program, which prevents and detects leaks of petroleum products and hazardous substances and protects groundwater from leaking tanks. The UST Program registers all USTs in the state, conducts operator training, certifies contractors, and conducts inspections and compliance assistance at petroleum storage facilities. The program is also responsible for the assessment and remediation of UST facilities and the management of the Mississippi Groundwater Protection Trust Fund if a confirmed release of petroleum product is identified at a facility.

The compliance program inspects UST facilities and are responsible for ensuring 7,911 tanks at 2,962 facilities have the appropriately maintained equipment. In Fiscal Year 2022, there were 10,841 inspections conducted.

A UST-certified contractor program ensures proper installation and maintenance of UST systems. This past year 74 new UST certified contractor licenses and four renewal licenses were issued. There are currently 424 certified individuals that perform tank installations, alterations, testing, and/or permanent closures. There are currently 564 Leaking Underground Storage Tank sites.

In the event of a release, the Trust Fund is used by MDEQ to assess and clean up contamination resulting from leaking USTs with no additional costs for eligible tank owners and operators. The fund began in 1987, and in June 2022 it reached an overall payout of $224.8 million to reimburse eligible tank owners for the assessment and cleanup of sites contaminated from leaking USTs. At the end of this Fiscal Year, MDEQ was working on 664 sites that have had a confirmed or non-confirmed release and Trust Fund eligibility may or may not have been determined. During Fiscal Year 2022, $8.6 million was used to assess and remediate leaking underground storage tanks, a decrease of four percent of spending.

Revenue to operate the UST Program is derived from federal grants and annual active tank fees imposed on tank owners. In 2018, an UST Advisory Council was created to provide an independent review of the MDEQ UST Program funding needs to determine the recommended amount for the Fiscal Year annual tank fee. In 2022, the UST Advisory Board recommended a potential law change to allow the Trust Fund to be used to help fund the UST Program in lieu of continuing to raise the annual tank fee since the Trust Fund has remained sound since 1987. This law change passed in the 2022 Mississippi Legislative Session and was signed into law by the governor in April 2022.

LAND & WATER

WATER QUANTITY

Fiscal Year '22 Accomplishment Highlights

Completed 78 flow measurements on streams throughout the state in support of the MDEQ Mississippi Benthic Indicator of Stream Quality project.

Issued or renewed 232 drillers licenses, and all available data for new water wells drilled in the state were added to a database management system.

Sampled 60 water wells in a continuing effort to ascertain if agricultural practices are affecting the quality of groundwater aquifer systems statewide.

The Office of Land and Water Resources (OLWR) pursues a conjunctive water management approach that coordinates the use of the ground water and surface water resources of the state to satisfy desired water needs. OLWR ensures the use, storage, allocation, and management of water resources and that water pumped and impounded in Mississippi complies with applicable permit regulations. OLWR has programs that include the development and implementation of monitoring plans to accomplish the systematic collection, compilation, and management of data related to aquifers, streams, and lakes; water use surveys and meter reporting tools; the application of computer models to assist in making water management decisions; the review and processing of applications for permit issuance and modification; and enforcement of ground and surface water use permits.

OLWR is also responsible for licensing and regulating water well contractors; regulating the design, construction, and modification of certain dams in accordance with regulatory criteria to ensure that lives and property downstream are protected; and assessing potential contamination threats to public, domestic and industrial water supplies.

Water Quantity Goal: Maintain sustainable quantities of surface and groundwater in Mississippi.

Water Quantity Objective: Increase the efficiency of water use to improve sustainability of groundwater and surface water in Mississippi.

In Fiscal Year 2022, OLWR continued to engage large water users in industry, agriculture, public drinking water, and the energy sector to balance water use and economic development. In the Mississippi Delta, OLWR is developing innovative approaches to studying and addressing water sustainability in the heavily utilized alluvial aquifer. OLWR is also monitoring irrigation use outside of the Delta to mitigate competition with domestic and public supply drinking water resources.

In addition, OLWR continues to plan for, and work with the energy sector as it relates to hydraulic fracturing activities in Mississippi.

Water Resource Permitting and Management

The primary objective of the OLWR is to research and manage the water resources of the state to assure adequate supplies for the future. This is achieved by the coordinated interaction of the water withdrawal permitting process with the inventorying and assessment of the availability of water from freshwater aquifers and major freshwater streams. As the entity responsible for managing the water withdrawal permits, OLWR issued 2,319 new and renewal groundwater permits and 105 new and renewal surface water diversion permits in Fiscal Year 2022. Included in each permit is an established maximum withdrawal amount and any necessary special terms and conditions associated with a respective permit. For surface water permits, stream flows and lake levels are routinely monitored, and in the event that these fall below established standards, permittees are required to cease withdrawing water until flows rise above established minimums.

OLWR's Certification and Compliance Branch handles compliance and enforcement actions associated with water well drillers' licensing, terms, and conditions associated with groundwater and surface water withdrawal permits, and any other compliance issues. The branch works with industry, public suppliers, water well drillers, and other members of the regulated community to bring those entities into compliance with state laws and regulations. In addition, the Branch continued working with producers in the Mississippi Delta to verify compliance of conservation practices on farms as required by the terms and conditions of their groundwater withdrawal permits.

Assessment and Study of Water Resources

The abundant water supplies in Mississippi constitute one of the most important and valuable natural resources contributing directly to the quality of life and economic prosperity of the state. However, the water resources available in a given area of the state can vary significantly depending on various hydrogeologic conditions that may affect base flow in streams, water quality and quantity as well as the prolificacy of local aquifers.

The highly variable nature of these resources means that a concerted effort must be maintained to collect related groundwater and surface water data that will allow proper decisions to be made regarding the management and development of the state's water resources. OLWR monitors groundwater levels of the state's major freshwater aquifer systems, and reports and potentiometric maps are created to document changes in water levels. Additionally, the OLWR conducts in-depth regional hydrologic investigations of Mississippi's groundwater resources to gain a better understanding of water supplies in regionally prioritized areas. The OLWR staff provides a wide range of information useful for planning economic development projects, groundwater modeling, and development of groundwater resources for public drinking water supplies.

The water resources of Jones County were studied in Fiscal Year 2022. While the Catahoula aquifer is the primary source of water, the Hattiesburg, Cockfield, and Sparta aquifers were also studied. Water levels were measured and compared with historical levels in both aquifers. Current levels were used as a part of a larger project to create statewide potentiometric surface maps for the primary drinking water aquifers of Mississippi. Cross-sections were also completed to illustrate the location and depth of each aquifer interval in the area.

MDEQ staff completed a similar project to evaluate the water resources available in and around the city of Wiggins in Stone County. Water levels and trends in the Catahoula, Hattiesburg, and Pascagoula aquifers were studied as part of the work. Aquifer characteristics such as thickness and dip were illustrated with cross-sections running north to south and east to west through the county including work from OLWR Open File Report 284.

Water-level data from wells in the Mississippi River Valley Alluvial aquifer is being collected and evaluated to monitor the effects of pumping and to assist in development of water management practices. The OLWR is also working with the U.S. Geological Survey to update, refine, and utilize the Mississippi Delta portion of an existing regional groundwater flow model developed by USGS. This large-scale regional model covers the entire Mississippi embayment and extends through the primary drinking-water aquifers as part of the Mississippi Embayment Regional Aquifer Study. This model will be used to better understand the groundwater flow system, the potential effects of variations in pumping patters, and to evaluate various water resources management scenarios. New data continue to be collected for integration into the existing groundwater flow model.

In Fiscal Year 2022, staff also completed projects to evaluate the water resources available in Crystal Springs, located in northeast Copiah County, and in Collins, located in Covington County, where the Catahoula, Hattiesburg, and Citronelle aquifers are the primary source of water. Water levels in mostly public supply wells were measured and will be used in the creation of regional potentiometric surface maps of the aquifers, and updated hydrographs were made to illustrate changes.

OLWR continued to map the top of the Glendon Formation and the Moody's Branch Formation in the southern part of Mississippi. Cross-sections running from west to east and from north to south using information from these structure maps will create a framework to build into areas with little information. When completed, these maps will allow for the division of the aquifers of Miocene age into individual aquifer intervals.

MDEQ staff completed 78 flow measurements on streams throughout the state in support of the MDEQ Mississippi Benthic Indicator of Stream Quality project. In addition, USGS continuous stream gauging stations were monitored by the OLWR to evaluate low flow conditions in streams, or reaches of streams, to ensure the water bodies did not fall below their respective statistical low flow averages. During such low flow events, on-site

streamflow measurements were made where necessary to validate special terms and conditions related to surface water permit requirements.

Water Resources in the Mississippi Delta

The future of the Mississippi Delta's economic and environmental viability depends on abundant, accessible water of sufficient quality. Over 18,500 permitted irrigation wells screened in the shallow MRVA are used for irrigation, aquaculture, and wildlife management purposes. Over time, pumpage demands have continued to exceed recharge to the MRVA leading to continued overbalances of groundwater withdrawals versus aquifer recharge, disconnected surface and ground water interaction, and notable water-level declines in the aquifer. To address serious threats to the viability of the Mississippi Delta's MRVA aquifer and Delta-wide stream flows, MDEQ created an executive-level task force to address these water resource challenges in 2011, and a 2014 Executive Order created the Governor's Delta Sustainable Water Resources Task Force.

The Delta Sustainable Water Resources Task Force and its workgroups consist of various state and federal agencies, stakeholder organizations, and academia all focused on the development and implementation of approaches and strategies to ensure sustainable ground and surface water resources for current and future generations in the Mississippi Delta. In Fiscal Year 2021, OLWR adopted a new general permit (MRVA-003), which updated conservation measures as a way to encourage continued adoption of water conservation practices via the permitting process. In Fiscal Year 2022, 1,790 permits and certificates of coverage under the general permit were issued with conservation requirements as part of the special terms and conditions of the permit and certificate of coverage. An online reporting portal developed by OLWR specifically designed to receive meter reading data from participants continues to yield valuable information that will be critical to improving total pumpage estimates and model accuracy.

The future of the Mississippi Delta's economic and environmental viability depends on abundant, accessible water of sufficient quality.

Source Water Protection

OLWR Source Water Assessment Branch has the primary responsibility of coordinating groundwater quality protection efforts through the source water assessment program to notify public water supplies and customers of the relative susceptibility of their drinking water supplies to contamination.

The program also helps site the proper locations for new drinking water wells. OLWR staff worked closely with 1,535 public water systems, consisting of approximately 3,400 groundwater wells and five surface water intakes, to strengthen protection efforts of underground sources of public drinking water supply. Potential sources of contamination are identified for each individual city or town in each water supply protection area to use as support for planning decisions. Information gathering in the assessment process is incorporated into recommendations for actions that can be taken at the local level to protect drinking water sources.

Drillers Licensing

OLWR manages and maintains the testing and licensing of water well drillers. Applications for licenses are received along with verification of applicants' basic requirements through testing in accordance with state law and state regulations so current license holders are in compliance. During Fiscal Year 2022, the Drillers Licensing Program issued or renewed 232 licenses, and data for all water wells drilled in the state were added to a database management system. MDEQ staff taught a continuing education course regarding Mississippi drilling laws and regulations at three drilling conferences in Mississippi and one in Tennessee.

Mississippi Agricultural Chemical Groundwater Monitoring Program

Over 90 percent of Mississippi relies on groundwater for drinking water supply. Due to this dependence, there are concerns that agricultural chemicals may impact the valuable groundwater resources in the state. The Agricultural Chemical Monitoring Program determines what, if any, impact these practices may be having. For Fiscal Year 2022, OLWR staff sampled 60 water wells in a continuing effort to ascertain if agricultural practices are affecting the quality of groundwater aquifer systems statewide. This data is reported to well owners who have concerns about their domestic drinking water. As of Fiscal Year 2022, the program has sampled over 3,150 groundwater sources throughout the state, and to date, results indicate that no significant impacts to groundwater quality are directly attributable to agricultural practices.

DAM SAFETY

Fiscal Year '22 Accomplishment Highlights

Performed 530 inspections on 339 dams, resulting in dam owners initiating repairs or rehabilitation on 21 High Hazard dams.

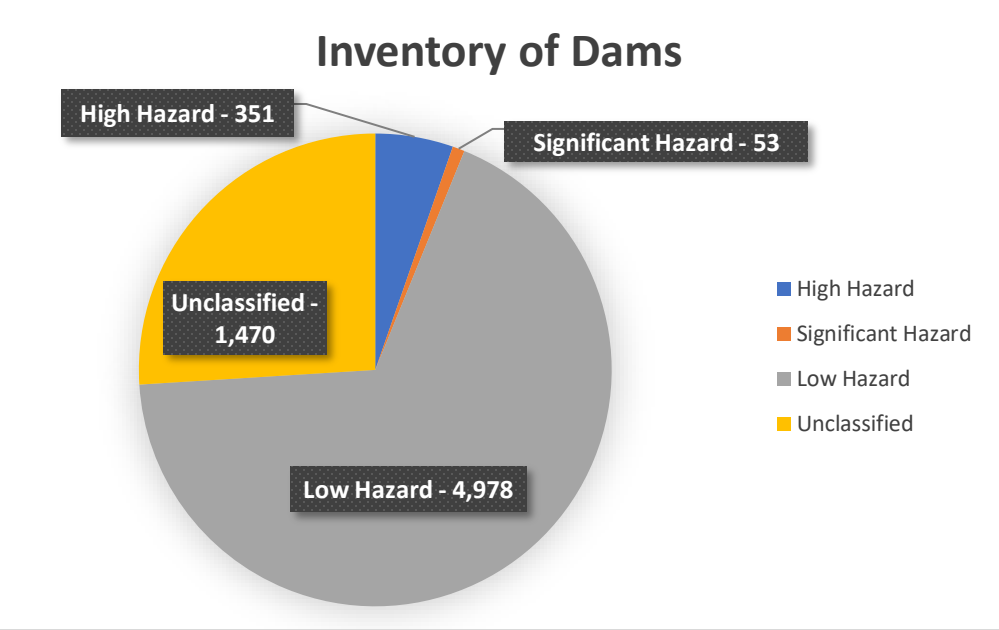
Responded to four dam incidents and were able to mitigate each emergency successfully.

Reviewed and approved applications to modify two low hazard dams, to construct 14 new low hazard dams and one new high hazard dam.

The state's dam safety regulations were implemented to protect life and property downstream of manmade dams. Dams are classified as either High Hazard, Significant Hazard, or Low Hazard in accordance with Dam Safety Regulations.

The OWLR Dam Safety Division reviews plans for repairs or modifications to existing dams, for the construction of new dams, conducts dam inspections, performs engineering analyses of dams, and reviews and approves Emergency Action Plans (EAPs) for High Hazard dams in addition to other duties.

Dam Safety Objective:
Protect downstream lives and property by ensuring that dams are properly classified, inspected, and maintained and include a current Emergency Action Plan as required.



There are currently 6,852 dams on inventory in Mississippi including unclassified dams. Unclassified dams are dams upon which preliminary engineering analysis shows that it could potentially be either High or Significant Hazard, but further analysis is needed for proper classification.

Regulations require that dam owners perform annual inspections of their High and Significant Hazard dams and have periodic inspections performed by a registered professional engineer at least once every five years. Dam owners are required to address any deficiencies noted during inspections resulting in applications to MDEQ for modification and/or rehabilitation. MDEQ also performs random inspections to verify that the conditions of the dams are being accurately reported in submitted inspection reports.

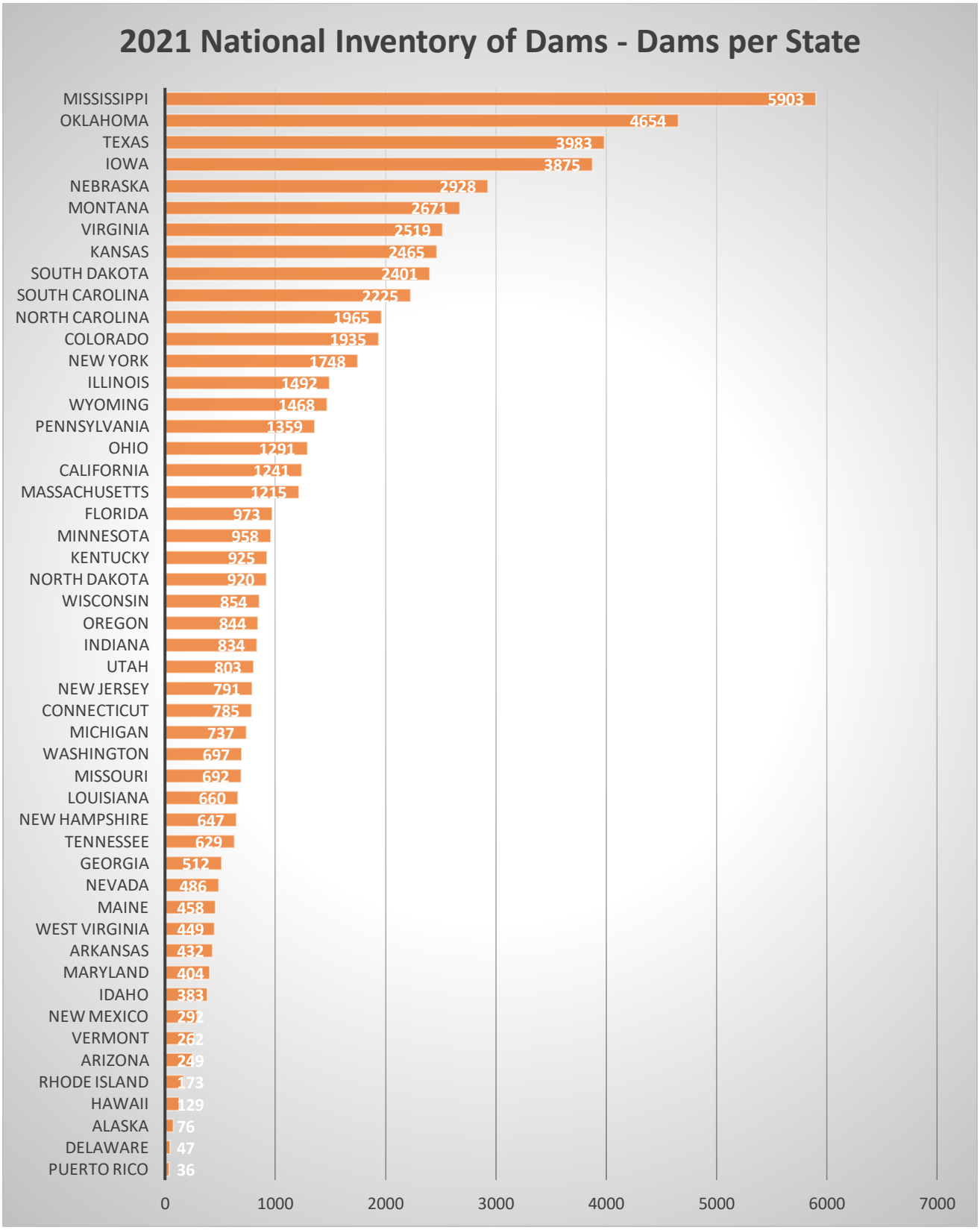
Mississippi leads the country in the number of dams qualified for inclusion on the National Inventory of Dams

During Fiscal Year 2022, 530 inspections were performed on 339 dams, and the information produced by these inspections resulted in dam owners initiating repairs or rehabilitation on 21 High Hazard dams. The Division also reviewed and approved applications to modify two Low Hazard dams, to construct 14 new Low Hazard dams and one new High Hazard dam.

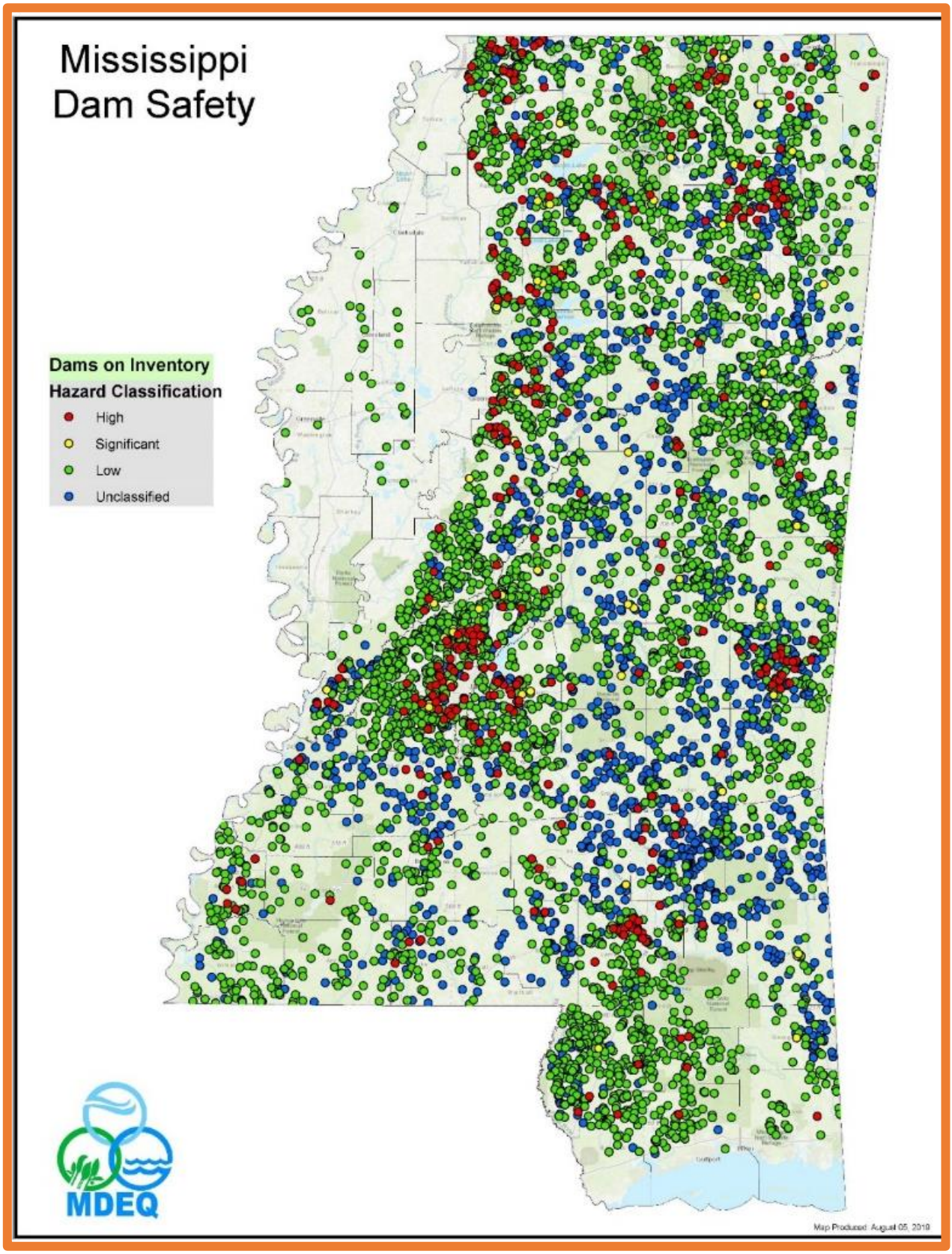
There are currently 306 EAPs on file for High Hazard dams, and the Division's goal is to have all owners of High Hazard dams submit EAPs for review and approval. Compliance with this goal presently stands at a Mississippi record high of 87 percent. The approval process includes review and approval at the county level by the local Emergency Management Agency and all first responders that would be required to implement the plans. This procedure has extended the anticipated schedule for completing the documents, but the involvement of local agencies in the plan development greatly enhances the value of the plans in safeguarding lives and property in the event of a dam failure.

One of the other major duties of the Dam Safety Division is to respond to dam incidents and failures. During the 2022 Fiscal Year, staff engineers responded to four dam incidents and were able to mitigate each emergency successfully. During emergencies, the Dam Safety Division provides on-site response and technical assistance to county emergency managers and dam owners.

Mississippi leads the country in the number of qualifying dams per state. To be included on the National Inventory of Dams maintained by the U.S. Army Corps of Engineers, a dam must exceed 20 feet in height and impound a volume of 40 acre-feet of water.



Database maintained by the US ACE


Mississippi
Dam Safety
Dams on Inventory
Hazard Classification
High
Significant
Low
Unclassified
MDEQ
Map Produced: August 05, 2019

PERMITTING

PERMITTING

MDEQ staff develop various types of environmental permits which are then presented to the Mississippi Environmental Quality Permit board for issuance. The Permit Board issues, reissues, modifies, denies, transfers, and revokes permits, and certifications administered under the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act, the Surface Mining Control and Reclamation Act, state mining laws, state Solid Waste law, and state water resource control laws.

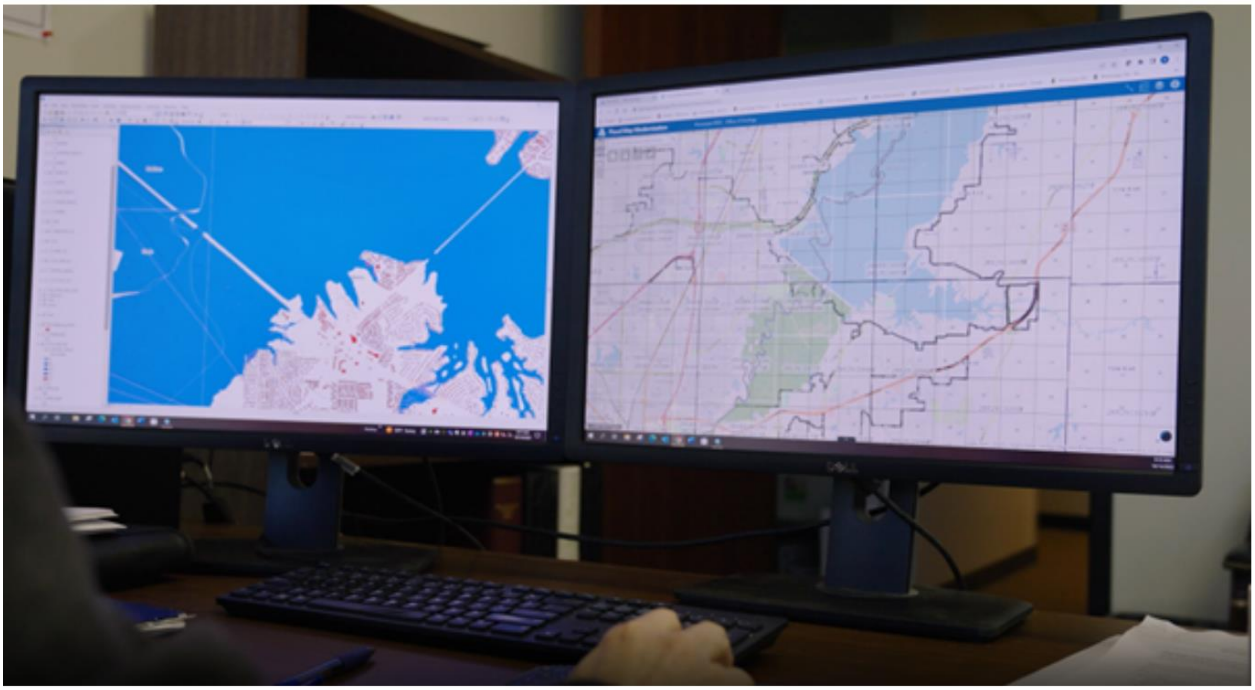
MDEQ's Office of Geology (GEO) manages permitting activities under the Surface Mining Control and Reclamation Act. **The Office of Land and Water Resources (OLWR)** manages permitting activities under the water resources control laws. **The Office of Pollution Control's Environmental Permits Division (EPP)** is responsible for Air Construction and Air Operating permits, Air Title V Operating permits, Wastewater - State No Discharge permits, Wastewater – NPDES permits, Wastewater – Pretreatment permits, Stormwater Construction and Operating permits, and Wetlands Impacts permits. **The OPC's Waste Division** is responsible for solid waste and waste tire permits, Beneficial Use Determinations, Emergency Debris management site approvals lagoon closure exemptions, Hazardous Waste operating and closure/post-closure care permits and generator ID numbers, and Underground Injection Control Program permits.

In Fiscal Year 2022:

- GEO - issued 20 initial and seven amended permits;
- EPD - issued modified or renewed 123 air permits, 161 water discharge permits, 40 pretreatment permits, 62 state operating permits, and 34 Water Quality Certifications. In addition, EPD re-issued several General Permits in SFY2022. EPD issued or modified 409 general permit coverages and re-issued 1332 re-coverages for sites that are regulated by General Permits;
- Waste Division - issued six solid waste management permits, 18 authorizations for emergency debris management sites, three Beneficial Use Determinations, two UIC permit modifications, and four RCRA permit modifications or renewals; and,
- OLWR – issued 2,319 groundwater withdrawal permits and 105 surface water withdrawal/diversion permits.

Currently there are more than 20,000 sites in the agency's permitting database. Many of these sites have permits that, by state and federal regulation, expire every five or ten years and must be reissued. As new companies enter the state and existing companies have changes or modifications, these activities also require permitting actions.

GEOLOGY



RECLAMATION

Fiscal Year '22 Accomplishment Highlights

A total of 1,627 bonded acres were completely reclaimed as a result of the division's efforts to oversee reclamation.

Preliminary Flood Insurance Rate Maps covering portions of 11 counties were released to the local communities for review, and eight counties had their new mapping become effective for flood insurance and flood plain management purposes.

The Surface Geology Division published 32 geological papers this fiscal year.

Surface Mining and Reclamation of Surface-Mined Lands

MDEQ's Office of Geology regulates all non-coal surface mines in the state as provided for in the Mississippi Surface Mining and Reclamation Act of 1977. This includes issuing surface mining permits and notices of exempt operations, inspecting permitted areas and complaints, overseeing the reclamation performed by operators, and enforcing the law as per the promulgated Rules and Regulations and Commission orders. Additionally, coal and lignite mines are regulated under the Mississippi Surface Coal Mining and Reclamation Law of 1979, with oversight of the program by the federal Office of Surface Mining Reclamation and Enforcement.

Reclamation Objective:

Ensure lands impacted by mining activities are restored to reclamation standards that are protective of human health and the environment.

In Fiscal Year 2022, the Mining and Reclamation Division performed 622 inspections (of which 46 were bond release inspections), recommended to the Permit Board the issuance of 20 initial and seven amended permits, and received 50 Notices of Exempt Operations (operations less than four acres in size). A total of 2,226 exempt operations are on file, covering approximately 8,904 acres. A total of 1,627 bonded acres were completely reclaimed as a result of the division's efforts to oversee reclamation. The state currently has 601 permits covering approximately 34,515 acres.

The Office of Geology's Mining and Reclamation Division continues to update the mining database that provides valuable mining information in a GIS format.

The Mining and Reclamation Division provides the required Mine Safety and Health Administration (MSHA) training for mining operations in the state. MSHA regulations require New Miner Training as well as an eight-hour Refresher Training course be taught to all mine workers. In Fiscal Year 2022, the staff provided 60 New Mining and Annual Refresher Certifications.

The Mining and Reclamation Division continues to focus on the complexities of coal mine regulation. Mississippi has an industry-estimated five billion tons of surface mineable lignite, a low-grade coal ranked just below sub-bituminous coal. The Mississippi Lignite Mining Company is mining lignite at the Red Hills Mine in Choctaw County to supply fuel for an adjacent 440-megawatt (MW) mine-mouth power plant. The mine produces over 3.5 million tons of lignite per year and has a permitted 6,090 acres. This permit (MS-002) was initially issued in 1998 and was renewed in February 2017 for its fourth five-year return. The planned life of the mine is 30 years. In January of 2020, a new surface coal mining permit (MS-004) was issued to the Red Hills Mine for an additional 4,190 acres.

The Liberty Fuels, LLC mine permit (MS-003) in southwestern Kemper County was issued in December 2011 for 2,299 acres. This permit was renewed in 2016. The Liberty Mine was to produce an average of 2.2 million tons of lignite per year for the initial five-year term, and 4.5 million tons per year for the planned 40-year life of mine. In 2017, Mississippi Power Company discontinued the coal gasification process and elected to operate the power plant exclusively on natural gas. In 2018, MDEQ approved a modification to the surface coal mining permit, fostering the reclamation of the site. Reclamation activities at the site are ongoing in Fiscal Year 2022 and will continue in Fiscal Year 2023.

Staff site inspections of all three surface coal mining permits are conducted at least monthly. One or more joint inspections of each mine are conducted annually with the Office of Surface Mining, Reclamation and Enforcement. It is anticipated that at least three applications for

permit revisions will be submitted and at least two bond release applications are anticipated during Fiscal Year 2023.

Work under Mississippi's Abandoned Mine Land Program to identify and locate abandoned historic coal mines identified four sites - two in Choctaw County and one each in Winston and Lauderdale counties. Reclamation work at the sites were completed in June 2018. However, in June 2020, anther mine entrance was discovered in Winston County and was reclaimed in Fiscal Year 2022. In Fiscal Year 2023, the program anticipates completed reclamation of AML sites on 16th Section lands in Covington and Simpson Counties.

Geological Data Collection Activities

Geologic Mapping

The primary charge of the Surface Geology Division is the Geologic Mapping Program, with the goal of mapping the entire state on 7.5-minute quadrangle sheets at a scale of 1:24,000. Completed maps are available in digital form online and as printed copies published in the Office of Geology's Open-File Report series. Geologic maps are fundamental to characterizing the environment. Mapping at a 1:24,000 scale provide the detailed geologic information needed for environmental land-use decisions in municipal planning; to locate recharge areas for groundwater supplies; to locate mineral resources; aid in pollution prevention and effective mitigation; land management and protecting property from geologic hazards such as landslides, swelling clays, and floods; and to support academic research in ecology, paleontology, and archaeology.

The geologic mapping program for Fiscal Year 2022 was funded in part by a United States Geological Survey Mapping (STATEMAP) grant and a federal contract with the National Park Service. The STATEMAP component establishes the geologic framework of areas that are vital to the welfare of individual states. Each State Geologist determines the state's mapping priorities in consultation with a State Mapping Advisory Committee. These priorities are based on state requirements for geologic map information in areas of multiple issue needs or compelling single-issue needs and in areas where mapping is required to solve critical earth science problems.

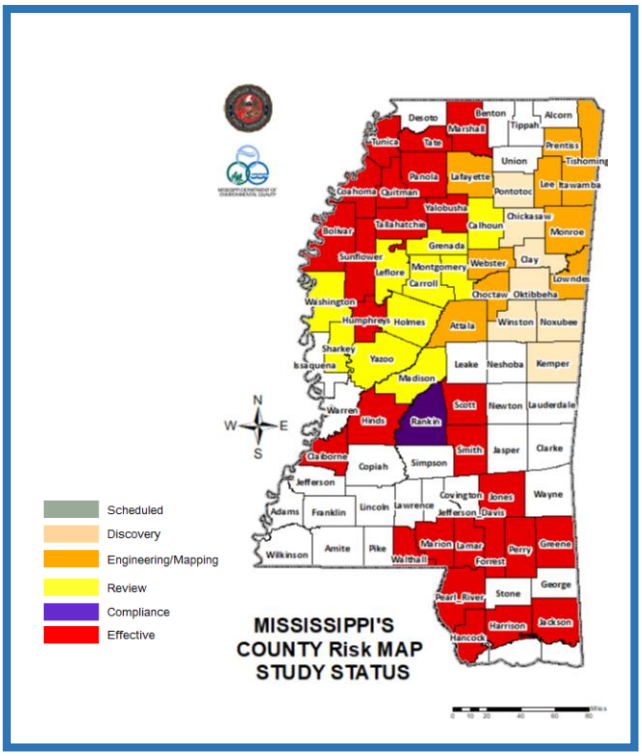
A total of 11 individual geologic quadrangles maps were publish in Fiscal Year 2022. Deliverables published for the STATEMAP 2021 grant were three 7.5-minute geologic quadrangle maps. Geologic mapping for the National Park Service is being funded by a two-

year renewable contact for the completion of detailed geologic quadrangle maps along the Natchez Trace Parkway. This work is also being performed by Mississippi State University in cooperation with the Surface Geology Division.

Detailed geologic Quadrangle mapping continues for the ultimate purpose of a revision of the 1969 State Geologic Map at a scale of 1:500,000. Completed maps are available to the public for free download in digital form at www.mdeq.ms.gov and as printed copies published in the Office of Geology's Open-File Report series.

Flood Mapping

The Office of Geology's Geospatial Resources Division is focused on remote sensing and geographic information systems activities and manages the Mississippi Flood Map Modernization Initiative and the Mississippi Risk Mapping, Assessment and Planning. The Risk Map program develops and updates digital flood insurance rate maps for the 82 counties under funding from FEMA. In Fiscal Year 2022, Preliminary Flood Insurance Rate Maps covering portions of 11 counties were released to the local communities for review, and eight counties had their new mapping become effective for flood insurance and flood plain management purposes.



The Office of Geology's Geospatial Resources Division

The Geospatial Resources Division is responsible for Mississippi Digital Earth Model's development. MDEM develops digital geographic information that will serve as the state base map and consists of eight layers of digital information. MDEQ manages and monitors the MDEM data development contracts and the Quality Assurance of the mapping products that result from this work. Products will be used by state and local governments, engineering firms, and construction companies involved in planning, development, construction, or regulatory work throughout the state. In Fiscal Year 2022, the Division took delivery of color 12 inch and six-inch orthoimagery from contractors covering six counties collected in the 2020-21 Mississippi Coordinated County Orthoimagery Project and three counties collected by MDEQ's contractor. Additionally, late in the Fiscal Year, the Division received its copy of over 6,600 square miles of QL2 (.7 meter) LiDAR collected and processed by USGS

contractors and funded by the National Resources Conservation Service as part of the National 3DEP program. The LiDAR covered areas in central and northeastern Mississippi. All orthoimagery and Lidar acquired by the Division is considered a part of MDEM and is made available to all state, county and federal governmental agencies, as well as engineering firms, public businesses and individuals.

Environmental Geology




Since the 1950s, the Office of Geology has been collecting subsurface geological information by sending scientific instruments down test holes and water wells to record data on rocks and groundwater. Environmental Geology Division staff logged 43 test holes and water wells during Fiscal Year 2022 and collected 23,145 feet of data on test holes that otherwise would not have been wireline logged. These geophysical logs were run for 16 different entities from industry, academia, and the Mississippi Office of Oil and Gas. Division personnel maintained the core and sample library by cataloging and archiving samples from oil and gas tests drilled in the state.

Publications

During FY 2022, 32 papers were published.

- Nine articles in the Mississippi Geological Society Bulletin
- Ten abstracts in the Mississippi Academy of Sciences Journal for 2022
- One abstract in the Geological Society of America, 71st Annual Southeastern Section Meeting 2022
- One MDEQ Office of Geology Open File Report OF-337
- One article in the MDEQ Office of Geology, Geoarchaeology: The McCraney Cache
- Ten geologic quadrangle maps

COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT

The Office of Community Engagement (OCE) coordinates with municipalities, industries, the public, and other regulators to create partnerships to allow shared accountability in developing strategies to address environmental concerns. The OCE remains committed to assisting the agency programs in addressing environmental impacts, connecting stakeholders to resources, and providing platforms for meaningful involvement.

Environmental Justice Program

The OCE's Environmental Justice Program assists agency programs with addressing environmental impacts across Mississippi. During Fiscal Year 2022, OCE hosted and/or participated in 57 local, regional, or national trainings to continue to address EJ concerns in the State of Mississippi. OCE attended nine in-person events in response to direct requests for EJ assistance and education made by local communities, Institutions of Higher Learning, and other agencies.

Small Business Environmental Assistance Program

The Small Business Environmental Assistance Program provides information about regulations, programs, and resources that are of importance to small businesses. The MDEQ staff responded to approximately 190 requests for general environmental information or specific requests for permitting or compliance needs. Responses to specific permitting and compliance requests for assistance have resulted in various opportunities to provide one-on-one training for businesses owners and municipal leaders who are unable to secure professional services for technical assistance. In FY2022, the SBEAP participated in over 40 national and regional trainings and workshops and continues to collaborate to help small businesses throughout the state.

- Diesel Emissions Reduction Program - The SBEAP conducted outreach to inform small business owners of grant and funding opportunities available through the Mississippi Diesel Emissions Reduction Program. The program provides funding to help implement cost-effective and innovative projects to reduce diesel emissions in the state. This program has been administered by the MDEQ Air Division since 2009.

- Dry Cleaners Compliance Calendar Outreach - Dry Cleaning facilities annually receive the Compliance Monitoring Calendars to help them comply with the monitoring and recordkeeping requirements found in the Perchloroethylene Dry Cleaner Regulations.

The SBEAP participated in over 40 national and regional trainings and workshops this Fiscal Year and continues to collaborate to help small businesses throughout the state.

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